

10/598,303

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(FILE 'HOME' ENTERED AT 11:14:14 ON 28 MAY 2009)

FILE 'CAPLUS' ENTERED AT 11:14:27 ON 28 MAY 2009  
L1       1 S US20080234483/PN  
          SELECT RN L1 1-

FILE 'REGISTRY' ENTERED AT 11:14:42 ON 28 MAY 2009  
L2       5 S E1-5  
L3       3 S L2 AND NRS>1

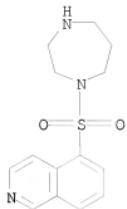
FILE 'CAPLUS' ENTERED AT 11:15:52 ON 28 MAY 2009  
L4       380 S L3  
L5       ANALYZE L4 1- RN HIT :       3 TERMS

FILE 'REGISTRY' ENTERED AT 11:19:19 ON 28 MAY 2009  
L6       1 S 103745-39-7/RN  
L7       2 S L3 NOT L6

FILE 'CAPLUS' ENTERED AT 11:19:41 ON 28 MAY 2009  
L8       350 S L6  
L9       45 S L7  
L10      15 S L8 AND L9  
L11      45 S L10 OR L9  
L12      335 S L4 NOT L11  
L13      127243 S HYDROCHLORIC ACID  
L14      9561 S HYDROBROMIC ACID  
L15      110585 S PHOSPHORIC ACID  
L16      169836 S SULFURIC ACID  
L17      252420 S ACETIC ACID  
L18      99302 S CITRIC ACID  
L19      39328 S TARTARIC ACID  
L20      104502 S LACTIC ACID  
L21      44827 S SUCCINIC ACID  
L22      23044 S FUMARIC ACID  
L23      33691 S MALEIC ACID  
L24      10207 S METHANESULFONIC ACID  
L25      0 S L12 AND L13  
L26      S L12 AND L14  
L27      1 S L12 AND L15  
L28      1 S L12 AND L16  
L29      1 S L12 AND L17  
L30      2 S L12 AND L18  
L31      0 S L12 AND L19  
L32      0 S L12 AND L20  
L33      0 S L12 AND L21  
L34      1 S L12 AND L22  
L35      0 S L12 AND L23  
L36      0 S L12 AND L24  
L37      717178 S (THIOCYANIC ACID OR BORIC ACID OR FORMIC ACID OR ?ACETIC ACID  
L38      16 S L12 AND L37  
L39      18 S L27 OR L28 OR L29 OR L30 OR L34 OR L38  
L40      63 S L11 OR L39  
L41      57 S L40 NOT (2008/SO OR 2007/SO OR 2006/SO)

=> d ibib abs hitstr total

L41 ANSWER 1 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
ACCESSION NUMBER: 2009:110393 CAPLUS  
DOCUMENT NUMBER: 150:366245  
TITLE: Fasudil Hydrochloride Hydrate, a Rho-Kinase Inhibitor,  
Suppresses 5-Hydroxytryptamine-Induced Pulmonary  
Artery Smooth Muscle Cell Proliferation via JNK and  
ERK1/2 Pathway  
AUTHOR(S): Chen, Xue-Yan; Dun, Jie-Ning; Miao, Qing-Feng; Zhang,  
Yong-Jian  
CORPORATE SOURCE: Department of Pharmacology, Hebei Medical University,  
Shijiazhuang, Peop. Rep. China  
SOURCE: Pharmacology (2009), 83(2), 67-79  
CODEN: PHMGBN; ISSN: 0031-7012  
PUBLISHER: S. Karger AG  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB Excessive proliferation of pulmonary artery smooth muscle cells (PASMCs) plays a critical role in the development of pulmonary artery hypertension, and inhibition of PASMC proliferation has been shown to be beneficial to patients with this disease. Recent studies indicate that Rho/ROCK is critically involved in the proliferation of smooth muscle cells. However, the signal transduction of Rho/ROCK and its downstream signaling are not fully understood. In the present study, we investigated the antiproliferation effect of fasudil hydrochloride hydrate, a Rho-kinase inhibitor, on rat PASMC proliferation, and the possible relation of Rho/ROCK to ERK, JNK pathways. The results indicate that fasudil effectively inhibited 5-HT-induced PASMC proliferation, as evaluated by MTT assay and protein expression of proliferating cell nuclear antigen. Flow cytometry anal. showed that fasudil markedly blocked 5-HT-induced cell-cycle progression by arresting the cells in the G0/G1 phase. Consistently, 5-HT-induced ROCK-1 mRNA expression and MYPT-1 phosphorylation were markedly suppressed by fasudil. In addition, fasudil significantly decreased 5-HT-induced JNK activation, ERK translocation to the nucleus and subsequent c-fos and c-jun expression. Taken together, these results indicate that Rho/ROCK is essential for PASMC proliferation produced by 5-HT. Fasudil effectively suppressed 5-HT-induced PASMC proliferation and cell-cycle progression, which was associated with inhibition of JNK activation, ERK translocation to nucleus and subsequent c-fos and c-jun expression.  
IT 186694-02-0  
RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(fasudil hydrochloride hydrate, a Rho-kinase inhibitor, suppresses 5-hydroxytryptamine-induced pulmonary artery smooth muscle cell proliferation via JNK and ERK1/2 pathway)  
RN 186694-02-0 CAPLUS  
CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]-,  
hydrochloride, hydrate (2:2:1) (CA INDEX NAME)



● HCl

● 1/2 H<sub>2</sub>O

REFERENCE COUNT:

37

THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L41 ANSWER 2 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2008:943696 CAPLUS  
 DOCUMENT NUMBER: 149:252504  
 TITLE: Bioresorbable metal stent with controlled resorption  
 INVENTOR(S): Orlowski, Michael; Ruebben, Alexander  
 PATENT ASSIGNEE(S): Eurocor GmbH, Germany  
 SOURCE: PCT Int. Appl., 29pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2008092436	A2	20080807	WO 2008-DE161	20080130
W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
DE 102007004589	A1	20080731	DE 2007-102007004589	20070130
PRIORITY APPLN. INFO.:			DE 2007-102007004589A	20070130
			US 2007-899636P	P 20070206

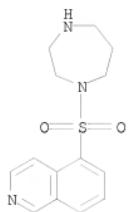
AB The invention relates to a special type of bioresorbable metal stent with controlled resorption owing to a coating with a special polymer, guaranteeing a controlled resorption of the coated endoprothesis after implantation into a blood vessel. The resorbable implant consists of a magnesium alloy that is provided with a biodegradable coating. The biodegradable coating consists preferably of biodegradable polymers and may addnl. contain at least one pharmacol. active substance such as an antiproliferative, antimigration, antiangiogenic, anti-inflammatory, antiphlogistic, cytostatic, cytotoxic and/or antithrombotic agent, anti-restenosis agents, corticoids, sex hormones, statins, epothilones, prostacyclins and/or angiogenesis inducers. Thus, a stent was based on Mg 89, Ca 7, Zn 1, Y 2, and other constituents 1% by weight

IT 103745-39-7

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (bioreversible metal stent with controlled resorption)

RN 103745-39-7 CAPLUS

CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]- (CA INDEX NAME)



L41 ANSWER 3 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2008:942926 CAPLUS  
 DOCUMENT NUMBER: 149:231714  
 TITLE: Biodegradable vascular support  
 INVENTOR(S): Hoffmann, Erika  
 PATENT ASSIGNEE(S): Hemoteq A.-G., Germany  
 SOURCE: PCT Int. Appl., 55pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

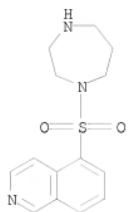
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2008092435	A2	20080807	WO 2008-DE160	20080130
W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
DE 102007034350	A1	20090129	DE 2007-102007034350	20070724
PRIORITY APPLN. INFO.:			DE 2007-102007005474A	20070130
			DE 2007-102007034350A	20070724

AB The invention relates to biodegradable vascular supports consisting of an inner biodegradable metal skeleton and an outer polymeric coating. The biodegradable coating preferably consists of biodegradable polymers and can also contain at least one pharmacol. active substance such as an anti-inflammatory, cytostatic, anti-angiogenic, fungicidal, antineoplastic, and/or antithrombogenic active ingredient. Thus, a stent was based on Mg 53, Fe 29.8, Ca 13, Y 3, Mn 0.2, and other constituents 1% by weight

IT 103745-39-7, Fasudil  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (biodegradable vascular support)

RN 103745-39-7 CAPLUS

CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]- (CA INDEX NAME)



L41 ANSWER 4 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2008:352859 CAPLUS  
 DOCUMENT NUMBER: 148:394354  
 TITLE: Compositions and methods for treatment of viral diseases  
 INVENTOR(S): Johansen, Lisa M.; Owens, Christopher M.; Mawhinney, Christina; Chappell, Todd W.; Brown, Alexander T.; Frank, Michael G.; Altmeyer, Ralf  
 PATENT ASSIGNEE(S): Combinatorix (Singapore) Pte. Ltd., Singapore  
 SOURCE: PCT Int. Appl., 237pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

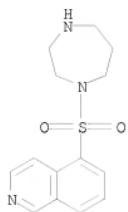
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2008033466	A2	20080320	WO 2007-US19932	20070913
WO 2008033466	A3	20081211		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA				
US 20080161324	A1	20080703	US 2007-900893	20070913
PRIORITY APPLN. INFO.:			US 2006-844463P	P 20060914
			US 2006-874061P	P 20061211

AB Based on the results of the authors screen identifying compds. and combinations of compds. having antiviral activity, the present invention features compns., methods, and kits useful in the treatment of viral diseases. In certain embodiments, the viral disease is caused by a single stranded RNA virus, a flaviviridae virus, or a hepatic virus. In particular embodiments, the viral disease is viral hepatitis (e.g., hepatitis A, hepatitis B, hepatitis C, hepatitis D, hepatitis E). Also featured are screening methods for identification of novel compds. that may be used to treat a viral disease.

IT 103745-39-7, Fasudil  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(compns. and methods for treatment of viral diseases)

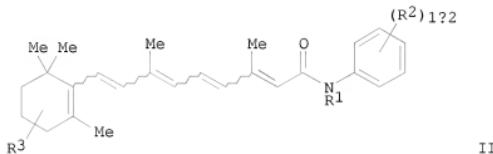
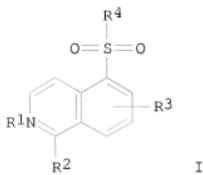
RN 103745-39-7 CAPLUS  
 CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]- (CA INDEX NAME)



L41 ANSWER 5 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2008:192035 CAPLUS  
 DOCUMENT NUMBER: 148:254222  
 TITLE: Compounds for improving learning and memory  
 INVENTOR(S): Stephan, Dietrich A.; Huentelman, Matthew J.;  
 Papassotiropoulos, Andreas; De Quervain, Dominique  
 J.-F.  
 PATENT ASSIGNEE(S): Translational Genomics Research Institute, USA;  
 University of Zurich  
 SOURCE: PCT Int. Appl., 63pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2008019395	A2	20080214	WO 2007-US75728	20070810
WO 2008019395	A9	20080417		
WO 2008019395	A3	20081120		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
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AU 2007281701	A1	20080214	AU 2007-281701	20070810
CA 2659289	A1	20080214	CA 2007-2659289	20070810
US 20080108568	A1	20080508	US 2007-837326	20070810
EP 2061314	A2	20090527	EP 2007-840881	20070810
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, RS				
PRIORITY APPLN. INFO.:				
		US 2006-837030P	P 20060810	
		US 2007-917476P	P 20070511	
		WO 2007-US75728	W 20070810	

OTHER SOURCE(S): MARPAT 148:254222  
 GI



**AB** The invention provides a method for improving learning and memory in a subject by administering a therapeutically effective amount of a compound of Formula (I), R1 = absent, H, C1-6 alkyl, R2 = H, OH, or halogen, R3 = H, C1-6 alkyl, R4 = N-linked heterocyclic ring, etc.; or Formula (II), R1 = H, C1-6 alkyl, R2 = H, C1-6 alkyl, OH, etc., R3 = H, C1-6 alkyl, and wavy line = double bond, etc.: or (R1)x-Ser-Ile-Tyr-Arg-Arg-Gly-Ala-Arg-Arg-Trp-Arg-Lys-Leu -(R2)y, R1 and R2 = amino acid sequences. Fasudil administration to aging rats significantly improved working memory.

**IT** 103745-39-7 103745-39-7D, salts, hydrates, and solvates

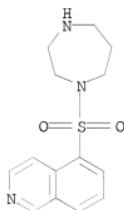
105628-07-7 105628-07-7D, hydrates, and solvates

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(compds. for improving learning and memory)

**RN** 103745-39-7 CAPLUS

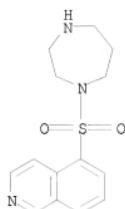
**CN** Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]- (CA INDEX NAME)



**RN** 103745-39-7 CAPLUS

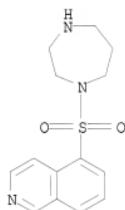
10/598,303

CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]- (CA INDEX NAME)



RN 105628-07-7 CAPLUS

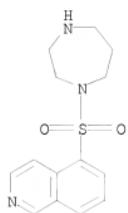
CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]-, hydrochloride (1:1) (CA INDEX NAME)



● HCl

RN 105628-07-7 CAPLUS

CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]-, hydrochloride (1:1) (CA INDEX NAME)



● HCl

L41 ANSWER 6 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2007:1484133 CAPLUS  
 DOCUMENT NUMBER: 148:151915  
 TITLE: Cardiovascular compositions containing hemihydrate or trihydrates of fasudil salts  
 INVENTOR(S): Huang, Zhenhua  
 PATENT ASSIGNEE(S): Peop. Rep. China  
 SOURCE: Faming Zuanli Shenqing Gongkai Shuomingshu, 17pp.  
 CODEN: CNXXEV  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Chinese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

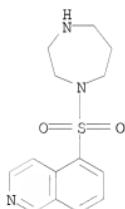
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 101092413	A	20071226	CN 2006-10044980	20060623

PRIORITY APPLN. INFO.: CN 2006-10044980 20060623

AB The invention relates to pharmaceutical hydrates of fasudil salts, which include nitrate, sulfate, bromide, phosphate, mesylate, tartrate, citrate, fumarate, maleate or succinate; and the hydrate is hemihydrate or trihydrate. The invention also relates to pharmaceutical composition in forms of injection or oral preps. containing the above pharmaceutical salt hydrate of fasudil, other active constituent and pharmaceutically acceptable carrier. The inventive product is used for preparing medicaments for treating and/or preventing cardiovascular and cerebrovascular diseases, with advantages of good stability, fine dissolvability, simple preparation process, low cost, high purity, high yield, stable quality and being suitable for industrial production

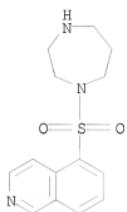
IT 103745-39-7P, Fasudil  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (cardiovascular compns. containing hemihydrate or trihydrates of fasudil salts)

RN 103745-39-7 CAPLUS  
 CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]- (CA INDEX NAME)



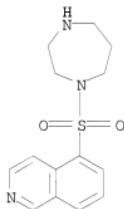
IT 103745-39-7DP, Fasudil, salts and hydrates  
 RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (cardiovascular compns. containing hemihydrate or trihydrates of fasudil)

salts)  
RN 103745-39-7 CAPLUS  
CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]- (CA INDEX  
NAME)



L41 ANSWER 7 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2007:1081954 CAPLUS  
 DOCUMENT NUMBER: 147:357220  
 TITLE: Nervous function reconstruction by using Rho kinase inhibitors for olfactory-mucosa grafting for treatment of central nervous system injury  
 INVENTOR(S): Kippo, Toshiki; Iwatsuki, Koichi; Kishima, Haruhiko; Yamashita, Toshihide  
 PATENT ASSIGNEE(S): Osaka University, Japan; Chiba University  
 SOURCE: Jpn. Kokai Tokkyo Koho, 13pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

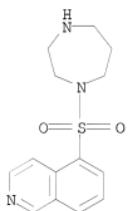
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PRIORITY APPLN. INFO.:	JP 2007246466	A	20070927	JP 2006-74380	20060317
				JP 2006-74380	20060317
AB Nervous function reconstruction and regeneration by using Rho kinase inhibitors, including fasudil HCl, for olfactory-mucosa grafting are claimed for treatment of central nervous system injury, e.g. trauma, spinal cord injury, cerebrovascular disorder. The Rho kinase inhibitors can be given by injection or i.v. infusions.					
IT	105628-07-7, Fasudil hydrochloride				
	RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)				
	(nervous function reconstruction by using Rho kinase inhibitors for olfactory-mucosa grafting for treatment of central nervous system injury)				
RN	105628-07-7 CAPLUS				
CN	Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]-, hydrochloride (1:1) (CA INDEX NAME)				



● HC1

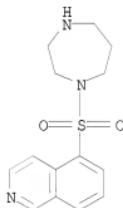
L41 ANSWER 8 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2007:1016569 CAPLUS  
 DOCUMENT NUMBER: 148:503081  
 TITLE: Novel drug delivery system  
 INVENTOR(S): Nadkarni, Sunil Sadanand; Vaya, Navin; Karan, Rajesh Singh; Gupta, Vinod Kumar  
 PATENT ASSIGNEE(S): Torrent Pharmaceuticals Limited, India  
 SOURCE: Indian Pat. Appl., 80pp., Addn. of Indian Appl. No. 2004MU198.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
IN 2005MU01012	A	20070831	IN 2005-MU1012	20050826
PRIORITY APPLN. INFO.:			IN 2004-MU198	A0 20040220
AB A novel modified release dosage form comprising of a high solubility active ingredient, which utilizes dual retard technique to effectively reduce the quantity of release controlling agents. Present invention can optionally comprise addnl. another active ingredient as an immediate release form or modified release form. Present invention also relates to a process for preparing the said formulation.				
IT 103745-39-7, Fasudil	RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (novel drug delivery system)			
RN 103745-39-7 CAPLUS				
CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]- (CA INDEX NAME)				



L41 ANSWER 9 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2007:851418 CAPLUS  
 DOCUMENT NUMBER: 147:263598  
 TITLE: Quality control method for fasudil hydrochloride injection  
 INVENTOR(S): Yao, Xiaoqing  
 PATENT ASSIGNEE(S): Tianjin Chasesun Pharmaceutical Co., Ltd., Peop. Rep. China  
 SOURCE: Faming Zhanli Shenqing Gongkai Shuomingshu, 10pp.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Chinese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

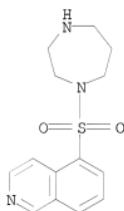
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
	CN 101008637	A	20070801	CN 2007-10000226	20070111
PRIORITY APPLN. INFO.:	CN 2007-10000226				
AB	The title quality control method comprises characteristics observation, identification and inspection of contents, and assay of active ingredients. The identification of content comprises identifying contents by UV and visible spectrophotometry and nickel hydroxide test paper. The inspection of contents comprises testing pH value, color, heat source, asperis, and related substance by high performance liquid chromatog. (HPLC). The assay of active ingredients comprises measuring content of fasudil hydrochloride by UV and visible spectrophotometry.				
IT	105628-07-7, Fasudil hydrochloride RL: ANT (Analyte); ANST (Analytical study) (quality control method for fasudil hydrochloride injection)				
RN	105628-07-7 CAPLUS				
CN	Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]-, hydrochloride (1:1) (CA INDEX NAME)				



● HCl

L41 ANSWER 10 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2007:769872 CAPLUS  
 DOCUMENT NUMBER: 148:387155  
 TITLE: Novel dosage form  
 INVENTOR(S): Nadkarni, Sunil Sadanand; Vaya, Navin; Karan, Rajesh  
 Singh; Gupta, Vinod Kumar  
 PATENT ASSIGNEE(S): Torrent Pharmaceuticals Limited, India  
 SOURCE: Indian Pat. Appl., 96pp.  
 CODEN: INXXBQ  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
IN 2005MU01013	A	20070629	IN 2005-MU1013	20050826
PRORITY APPLN. INFO.:				
AB A dosage form comprising of a high-dose, high-solubility active ingredient for modified release and a low-dose active ingredient for immediate release wherein the weight ratio of immediate-release active ingredient and modified-release active ingredient is from 1:10 to 1:15000 and the weight of modified-release active ingredient per unit is from 500 mg to 1500 mg. A process for preparing the dosage form is provided.				
IT 103745-39-7, Fasudil RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (novel dosage form containing modified-release and immediate-release active ingredients)				
RN 103745-39-7 CAPLUS CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]- (CA INDEX NAME)				



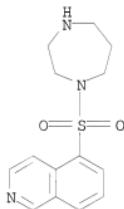
L41 ANSWER 11 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2007:741632 CAPLUS  
 DOCUMENT NUMBER: 147:197265  
 TITLE: New freeze-dried injection formulation of fasudil hydrochloride  
 INVENTOR(S): Zhou, Changhai  
 PATENT ASSIGNEE(S): Peop. Rep. China  
 SOURCE: Faming Zuanli Shenqing Gongkai Shuomingshu, 7pp.  
 CODEN: CNXXEV  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Chinese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1989967	A	20070704	CN 2005-10136032	20051229
PRIORITY APPLN. INFO.:			CN 2005-10136032	20051229

AB The freeze-dried injection contains one or more of fasudil hydrochloride and its hydrate, and excipient. The excipient of the freeze-dried injection is selected from mannitol, glycine, low mol. weight dextran, lactose and polyethylene glycol. The weight ratio of fasudil hydrochloride and/or its hydrate to excipient is 1 : (1-4). The freeze-dried injection is prepared by dissolving fasudil hydrochloride and excipient in injection water resp., mixing, filtering, adding injection water, filtering to remove bacteria, bottling, and freeze-drying. The invention can improve stability of fasudil hydrochloride and safety of freeze-dried injection.

IT 105628-07-7, Fasudil hydrochloride  
 RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (new freeze-dried injection formulation of fasudil hydrochloride)

RN 105628-07-7 CAPLUS  
 CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]-, hydrochloride (1:1) (CA INDEX NAME)



● HCl

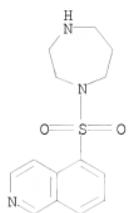
L41 ANSWER 12 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2007:561763 CAPLUS  
 DOCUMENT NUMBER: 146:494108  
 TITLE: Anti-angiogenic activity of 2-methoxyestradiol in combination with anti-cancer agents  
 INVENTOR(S): Plum, Stacy M.; Strawn, Steven J.; Lavallee, Theresa M.; Sidor, Carolyn F.; Fogler, William E.; Treston, Anthony M.  
 PATENT ASSIGNEE(S): Entremed, Inc., USA  
 SOURCE: PCT Int. Appl., 49pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007059111	A2	20070524	WO 2006-US44152	20061114
WO 2007059111	A3	20090514		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, RU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MM, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA				
US 20070185069	A1	20070809	US 2006-599997	20061114
PRIORITY APPLN. INFO.:			US 2005-736220P	P 20051114
			US 2006-788354P	P 20060331

AB The present invention relates generally to methods and compns. of treating disease characterized by abnormal cell proliferation and/or abnormal or undesirable angiogenesis by administering antiangiogenic agents in combination with chemotherapeutic agents. More specifically, the present invention relates to a methods and compns. of treating diseases characterized by abnormal cell proliferation and/or abnormal or undesirable angiogenesis by administering 2-methoxyestradiol, in combination with chemotherapeutic agents.

IT 105628-07-7, Fasudil hydrochloride  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (anti-angiogenic activity of 2-methoxyestradiol and other estradiols in combination with anti-cancer agents)

RN 105628-07-7 CAPLUS  
 CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]-, hydrochloride (1:1) (CA INDEX NAME)



● HCl

L41 ANSWER 13 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2007:538868 CAPLUS  
 DOCUMENT NUMBER: 146:507711  
 TITLE: Composition comprising endothelin conversion enzyme inhibitor for treatment of cardiovascular and other associated disorders  
 INVENTOR(S): Jain, Rajesh; Jindal, Kour Chand  
 PATENT ASSIGNEE(S): Panacea Biotech Ltd, India  
 SOURCE: PCT Int. Appl., 46pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007054975	A1	20070518	WO 2006-IN437	20061107
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				

PRIORITY APPLN. INFO.: IN 2005-DE2986 A 20051108

OTHER SOURCE(S): MARPAT 146:507711

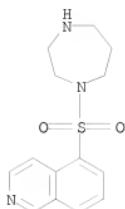
AB This invention relates to compns. comprising at least one endothelin conversion enzyme (ECE) inhibitor and/or neutral endopeptidase (NEP) inhibitor in combination with at least one another active agent optionally with other pharmaceutically acceptable excipients useful in the prophylaxis, treatment and/or amelioration of cardiovascular and other associated disorders such as one or more of coronary artery disease, congestive heart failure, angina, atherosclerosis, hyperlipidemia, diabetes, neurodegenerative disorders. Also described are process for preparation of such compns. and method of using such compns. Thus, immediate release tablet was prepared containing SLV-306 150 mg, atenolol 50 mg, sodium bicarbonate 150 mg, microcryst. cellulose 105 mg, sodium starch glycolate 40 mg, Povidone K-30 10 mg, magnesium stearate 5 mg, colloidal silicone dioxide 5 mg, and magnesium stearate 5 mg.

IT 103745-39-7, Fasudil

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (composition comprising endothelin conversion enzyme inhibitor for treatment of cardiovascular and other associated disorders)

RN 103745-39-7 CAPLUS

CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]- (CA INDEX NAME)



REFERENCE COUNT:

12

THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L41 ANSWER 14 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2007:432005 CAPLUS  
 DOCUMENT NUMBER: 146:395318  
 TITLE: Remedies for sensory disturbances containing fasudil or hydroxyfasudil and compositions containing the same  
 INVENTOR(S): Doi, Katsumi; Kubo, Takeshi; Senba, Osamu  
 PATENT ASSIGNEE(S): Asahi Chemical Pharma Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 11pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2007099675	A	20070419	JP 2005-291450	20051004
			JP 2005-291450	20051004

PRIORITY APPLN. INFO.: OTHER SOURCE(S): MARPAT 146:395318

AB The invention provides a remedy for sensory disturbance, e.g. hearing disorder, vestibular disorder, and dizziness, characterized by containing fasudil or hydroxyfasudil, or its salt or hydrate as an active component. A composition for treatment of sensory disturbance containing (1) fasudil or hydroxyfasudil, or its salt, (2) a steroid, prostaglandin, vitamin, calcium blocker, low-mol.-weight dextran, and/or anticoagulant is also disclosed. For example, an injection composition containing fasudil hydrochloride

10 mg/2 mL was formulated, and applied to a patient with sudden deafness.

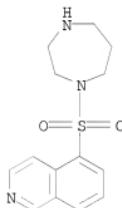
IT 103745-39-7, Fasudil 105628-07-7, Fasudil hydrochloride

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(remedies for sensory disturbances containing fasudil or hydroxyfasudil, and compns. containing the same)

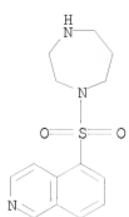
RN 103745-39-7 CAPLUS

CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]- (CA INDEX NAME)



RN 105628-07-7 CAPLUS

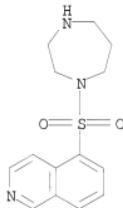
CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]-, hydrochloride (1:1) (CA INDEX NAME)



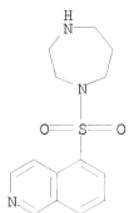
● HCl

L41 ANSWER 15 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2007:431999 CAPLUS  
 DOCUMENT NUMBER: 146:387189  
 TITLE: Isoquinolinesulfonylhomopiperazine compounds for the treatment of dermatitis  
 INVENTOR(S): Oniki, Shuntaro; Horikawa, Tatsuya; Nishikiori, Chikako  
 PATENT ASSIGNEE(S): Asahi Chemical Pharma Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 8pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
	JP 2007099676	A	20070419	JP 2005-291451	20051004
PRIORITY APPLN. INFO.:	JP 2005-291451				
AB	Isoquinolinesulfonylhomopiperazine derivs. and salts and hydrates thereof are effective for the treatment of dermatitis. The above compds. may be used together with steroids. For example, an injection was formulated containing 1-(5-isooquinolinesulfonyl)homopiperazine·HCl salt 10 mg, NaCl 16 mg, and distilled water to 2 mL.				
IT	103745-39-7 105628-07-7 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (isoquinolinesulfonylhomopiperazine compds. for treatment of dermatitis)				
RN	103745-39-7 CAPLUS				
CN	Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]- (CA INDEX NAME)				



RN 105628-07-7 CAPLUS  
 CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]-, hydrochloride (1:1) (CA INDEX NAME)

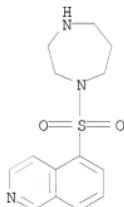


● HCl

L41 ANSWER 16 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2006:819593 CAPLUS  
 DOCUMENT NUMBER: 145:321576  
 TITLE: Fasudil hydrochloride formulation for oral administration  
 INVENTOR(S): Yao, Xiaoqing  
 PATENT ASSIGNEE(S): Tianjin Chasesun Pharmaceutical Co., Ltd., Peop. Rep. China  
 SOURCE: Faming Zhanli Shenqing Gongkai Shuomingshu, 24pp.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Chinese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1813762	A	20060809	CN 2005-10130096	20051212
CN 100367967	C	20080213		

PRIORITY APPLN. INFO.: CN 2005-10130096 20051212  
 AB Fasudil hydrochloride is formulated into tablets, capsules and granules with appropriate adjuvants e.g. lactose, hydroxypropyl cellulose, Opadry, carboxymethyl starch sodium, talc powder and titanium dioxide to treat cerebral vasospasm following subarachnoid hemorrhage. Method for quality control is also established. Formulation for oral administration is convenient to use.  
 IT 105628-07-7, Fasudil hydrochloride  
 RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)  
 (fasudil hydrochloride formulation for oral administration)  
 RN 105628-07-7 CAPLUS  
 CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]-, hydrochloride (1:1) (CA INDEX NAME)



● HCl

L41 ANSWER 17 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2006:494188 CAPLUS  
 DOCUMENT NUMBER: 145:7747  
 TITLE: Preparation of prodrugs of (2R)-2-propyloctanoic acid  
 for the treatment of stroke  
 INVENTOR(S): Munoz, Benito; Payne, Joseph E.; Prasit, Petpiboon;  
 Reger, Thomas S.; Smith, Nicholas D.  
 PATENT ASSIGNEE(S): Merck & Co., Inc., USA  
 SOURCE: PCT Int. Appl., 61 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006055381	A2	20060526	WO 2005-US40727	20051110
WO 2006055381	A3	20060803		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
AU 200506741	A1	20060526	AU 2005-306741	20051110
CA 2587040	A1	20060526	CA 2005-2587040	20051110
EP 1814838	A2	20070808	EP 2005-851501	20051110
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR				
CN 101056842	A	20071017	CN 2005-80038863	20051110
JP 2008520569	T	20080619	JP 2007-541311	20051110
IN 2007CN01651	A	20070831	IN 2007-CN1651	20070423
US 20080132488	A1	20080605	US 2007-667814	20070515
US 7495029	B2	20090224		
KR 2007085379	A	20070827	KR 2007-711132	20070516
PRIORITY APPLN. INFO.:			US 2004-628280P	P 20041116
			WO 2005-US40727	W 20051110

OTHER SOURCE(S): CASREACT 145:7747; MARPAT 145:7747

AB Prodrugs of (2R)-2-propyloctanoic acid, and pharmaceutical compns.  
 comprising them, which may be effective in modulating multiple events in  
 the biochem. cascade of stroke are prepared.

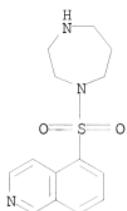
IT 103745-39-7, Fasudil

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of prodrugs of (2R)-2-propyloctanoic acid for the treatment of  
 stroke)

RN 103745-39-7 CAPLUS

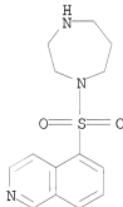
CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]- (CA INDEX  
 NAME)



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L41 ANSWER 18 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
ACCESSION NUMBER: 2006:374017 CAPLUS  
DOCUMENT NUMBER: 144:456493  
TITLE: Manufacture of fasudil hydrochloride injections  
INVENTOR(S): Wu, Liangxin  
PATENT ASSIGNEE(S): Peop. Rep. China  
SOURCE: Faming Zhuanli Shengqing Gongkai Shuomingshu, 12 pp  
CODEN: CNXXEV  
DOCUMENT TYPE: Patent  
LANGUAGE: Chinese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

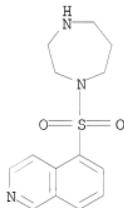
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1729985	A	20060208	CN 2005-10089011 CN 2005-10089011	20050802 20050802
PRIORITY APPN. INFO.:				
AB	The title fasudil hydrochloride injections are prepared from fasudil hydrochloride 0.01-0.2 weight% and pharmaceutically acceptable diluents (sodium chloride, glucose, or amino acids) 0.5-50 weight% by adjusting pH to 4.0-7.5, removing impurities and pyrogens, decolorizing, filtering and sterilizing, and freezing drying. The injectable solution is used conveniently by direct i.v. injection.			
IT	105628-07-7, Fasudil hydrochloride RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (manufacture of fasudil hydrochloride injections)			
RN	105628-07-7 CAPLUS			
CN	Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]-, hydrochloride (1:1) (CA INDEX NAME)			



● HC1

L41 ANSWER 19 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2006:374015 CAPLUS  
 DOCUMENT NUMBER: 144:456491  
 TITLE: Manufacture of fasudil hydrochloride freeze-dried powder  
 INVENTOR(S): Wu, Liangxin  
 PATENT ASSIGNEE(S): Peop. Rep. China  
 SOURCE: Faming Zuanli Shenqing Gongkai Shuomingshu, 13 pp.  
 CODEN: CNXXEV  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Chinese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1729984	A	20060208	CN 2005-10088775	20050801
PRIORITY APPLN. INFO.:			CN 2005-10088775	20050801
AB The title fasudil hydrochloride is manufactured from fasudil hydrochloride 1-5 weight% and pharmaceutically acceptable excipients 4-40 weight% by removing impurities and pyrogens, decolorizing, filtering and sterilizing, and freeze-drying. The fasudil hydrochloride is convenient to storing and transporting, and has high stability after long time placement.				
IT 105628-07-7, Fasudil hydrochloride RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (manufacture of fasudil hydrochloride freeze-dried powder)				
RN 105628-07-7 CAPLUS				
CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]-, hydrochloride (1:1) (CA INDEX NAME)				



● HCl

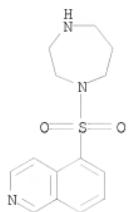
L41 ANSWER 20 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
ACCESSION NUMBER: 2006:100738 CAPLUS  
DOCUMENT NUMBER: 1441:198849  
TITLE: Novel dosage form comprising modified-release and immediate-release active ingredients  
INVENTOR(S): Vaya, Navin; Karan, Rajesh Singh; Sadanand, Sunil; Gupta, Vinod Kumar  
PATENT ASSIGNEE(S): India  
SOURCE: U.S. Pat. Appl. Publ., 49 pp., Cont.-in-part of U.S.  
Ser. No. 630,446.  
CODEN: USXXCO  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20060024365	A1	20060202	US 2005-134633	20050519
IN 2002MU00697	A	20040529	IN 2002-MU697	20020805
IN 193042	A1	20040626		
IN 2002MU00699	A	20040529	IN 2002-MU699	20020805
IN 2003MU00080	A	20050204	IN 2003-MU80	20030122
IN 2003MU00082	A	20050204	IN 2003-MU82	20030122
US 20040096499	A1	20040520	US 2003-630446	20030729
PRIORITY APPLN. INFO.:				
			IN 2002-MU697	A 20020805
			IN 2002-MU699	A 20020805
			IN 2003-MU80	A 20030122
			IN 2003-MU82	A 20030122
			US 2003-630446	A 20030729

AB A dosage form comprising of a high dose, high solubility active ingredient as modified release and a low dose active ingredient as immediate release where the weight ratio of immediate release active ingredient and modified release active ingredient is from 1:10 to 1:15000 and the weight of modified release active ingredient per unit is from 500 mg to 1500 mg; a process for preparing the dosage form. Tablets containing 10 mg sodium pravastatin and 1000 mg niacin were prepared. The release of sodium pravastatin after 24 h was 67.7%, and the release of niacin after 1 h was 84.1%.

IT 103745-39-7, Fasudil  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(novel dosage form comprising modified-release and immediate-release  
active ingredients)

RN 103745-39-7 CAPLUS  
CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]- (CA INDEX NAME)



L41 ANSWER 21 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2005:1314332 CAPLUS  
 DOCUMENT NUMBER: 144:40870  
 TITLE: Formulations containing fasudil, a matrix and an envelope  
 INVENTOR(S): Kranz, Heiko; Wagner, Torsten  
 PATENT ASSIGNEE(S): Schering Aktiengesellschaft, Germany  
 SOURCE: PCT Int. Appl., 52 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005117896	A1	20051215	WO 2005-EP5990	20050601
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.: DE 2004-102004027518A 20040603  
 US 2004-578351P P 20040610

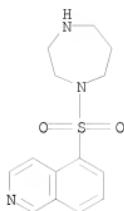
AB The invention relates to the use of a pharmaceutical formulation comprising 1-(5-isoquinolinesulfonyl)homopiperazine (FASUDIL) and derivs. thereof in a matrix body and an envelope surrounding the matrix body. The matrix body and envelope comprise poly vinyl pyrrolidone and poly vinyl acetate. Release occurs according to zero order reaction kinetics. The pharmaceutical formulation is used to treat diseases such as cardiovascular diseases, heart attacks, migraines, Alzheimer's disease, neuronal regeneration, tumors, erectile dysfunction, asthma, incontinence and menstrual complaints. Thus a matrix tablet was prepared by direct tablet pressing; it contained per basic unit (mg): fasudil hydrochloride hemihydrate 100; lactose 117.5; Kollidon SR 75; silica 3; magnesium stearate 4.5.

IT 103745-39-7, Fasudil 105628-07-7, Fasudil hydrochloride  
 186694-02-0

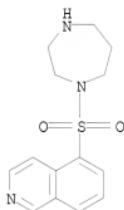
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (formulations containing fasudil, a matrix and an envelope)

RN 103745-39-7 CAPLUS

CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]- (CA INDEX NAME)

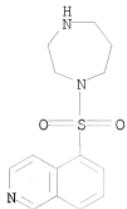


RN 105628-07-7 CAPLUS  
CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]-, hydrochloride  
(1:1) (CA INDEX NAME)



● HCl

RN 186694-02-0 CAPLUS  
CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]-,  
hydrochloride, hydrate (2:2:1) (CA INDEX NAME)



● HCl

● 1/2 H<sub>2</sub>O

REFERENCE COUNT:

1

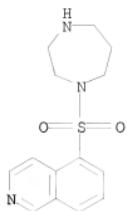
THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L41 ANSWER 22 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
ACCESSION NUMBER: 2005:1276806 CAPLUS  
DOCUMENT NUMBER: 144:32080  
TITLE: Effects of fasudil, a Rho-kinase inhibitor, on myocardial preconditioning in anesthetized rats  
AUTHOR(S): Demiryurek, Seniz; Kara, Ali F.; Celik, Ahmet; Babuel, Aydan; Tarakcioglu, Mehmet; Demiryurek, Abdullah T.  
CORPORATE SOURCE: Department of Physiology, Faculty of Medicine, Gazi University, Ankara, 06510, Turk.  
SOURCE: European Journal of Pharmacology (2005), 527(1-3), 129-140  
PUBLISHER: Elsevier B.V.  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB The aim of this study was to examine the effects of fasudil, a Rho-kinase inhibitor, on ischemic preconditioning and carbachol preconditioning in anesthetized rats. The total number of ventricular ectopic beats was markedly augmented with fasudil at 0.3 mg/kg and depressed with fasudil at 10 mg/kg. Fasudil at 10 mg/kg also markedly decreased the ventricular tachycardia incidence. Ischemic preconditioning, induced by 5 min coronary artery occlusion and 5 min reperfusion, decreased the incidence of ventricular tachycardia and abolished the occurrence of ventricular fibrillation. The incidences of ventricular tachycardia and ventricular fibrillation in the fasudil (10 mg/kg) + ischemic preconditioning group were found to be similar to the ischemic preconditioning group. However, low doses of fasudil (0.3 and 1 mg/kg) appeared to prevent the antiarrhythmic effects of ischemic preconditioning. Carbachol (4 µg/kg/min for 5 min) induced marked redns. in mean arterial blood pressure, heart rate and abolished ventricular tachycardia. Marked redns. in ventricular ectopic beats and ventricular tachycardia were noted in the fasudil (10 mg/kg) + carbachol preconditioning group. Lactate levels were markedly reduced in the ischemic preconditioning group and this reduction was prominently inhibited with fasudil at 1 mg/kg. Ischemic preconditioning caused a marked decrease in plasma malondialdehyde levels. Fasudil (10 mg/kg), ischemic preconditioning and carbachol preconditioning each generated marked redns. in ischemic myocardial malondialdehyde levels. Decreases in infarct size were observed with fasudil (10 mg/kg) treatment, ischemic preconditioning and carbachol preconditioning when compared to control. These results suggest that low doses of fasudil (0.3 and 1 mg/kg) prevent the effects of ischemic preconditioning and carbachol preconditioning, but a high dose of fasudil (10 mg/kg) was able to produce cardioprotective effects on myocardium against arrhythmias, infarct size or biochem. parameters and mimic the effects of ischemic preconditioning in anesthetized rats.

IT 105628-07-7, Fasudil hydrochloride  
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(effects of fasudil, a Rho-kinase inhibitor, on myocardial preconditioning in anesthetized rats)

RN 105628-07-7 CAPLUS  
CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]-, hydrochloride (1:1) (CA INDEX NAME)



● HCl

REFERENCE COUNT:

39

THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L41 ANSWER 23 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2005:1021625 CAPLUS  
 DOCUMENT NUMBER: 143:292607  
 TITLE: Fasudil-containing preparation and method of improving stability thereof  
 INVENTOR(S): Maejima, Takuji; Ohshima, Miki  
 PATENT ASSIGNEE(S): Asahi Kasei Pharma Corporation, Japan  
 SOURCE: PCT Int. Appl., 17 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005087237	A1	20050922	WO 2005-JP3772	20050304
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2559630	A1	20050922	CA 2005-2559630	20050304
EP 1726306	A1	20061129	EP 2005-720044	20050304
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR				
CN 1929847	A	20070314	CN 2005-80008301	20050304
US 20080234483	A1	20080925	US 2006-598303	20060824
KR 2007008634	A	20070117	KR 2006-721308	20061013
PRIORITY APPLN. INFO.:			JP 2004-75031	A 20040316
			WO 2005-JP3772	W 20050304

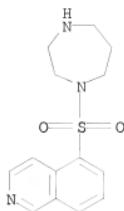
AB Disclosed are fasudil-containing preps. that despite the use of a container excelling in the visibility of contents without particularly blocking of light, exhibit high stability against light; and a method of improving the stability of the preps. against light, or storing the same. By regulating the pH value of aqueous solution of fasudil charged in a colorless transparent container to ≤5.5, there can be provided fasudil-containing preps. excelling in stability against light; and can be provided a method of improving the stability of the aqueous solution of fasudil against light, or storing the same.

IT 105628-07-7P, Fasudil hydrochloride

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (glass container for fasudil injection solns. with controlled pH for stability improvement)

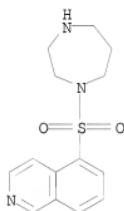
RN 105628-07-7 CAPLUS

CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]-, hydrochloride (1:1) (CA INDEX NAME)

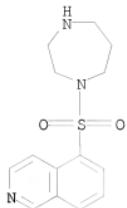


● HCl

IT 103745-39-7, Fasudil 186694-02-0  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(glass container for fasudil injection solns. with controlled pH for  
stability improvement)  
RN 103745-39-7 CAPLUS  
CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]- (CA INDEX  
NAME)



RN 186694-02-0 CAPLUS  
CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]-,  
hydrochloride, hydrate (2:2:1) (CA INDEX NAME)



● HCl

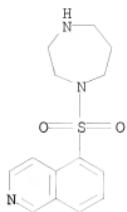
● 1/2 H<sub>2</sub>O

REFERENCE COUNT:

16

THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L41 ANSWER 24 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
ACCESSION NUMBER: 2005:942455 CAPLUS  
DOCUMENT NUMBER: 143:432579  
TITLE: Fasudil hydrochloride hydrate, a Rho-kinase (ROCK) inhibitor, suppresses collagen production and enhances collagenase activity in hepatic stellate cells  
AUTHOR(S): Fukushima, Marie; Nakamura, Makoto; Kohjima, Motoyuki; Kotoh, Kazuhiro; Enjoji, Munechika; Kobayashi, Naoya; Nawata, Hajime  
CORPORATE SOURCE: Department of Medicine and Bioregulatory Science, Graduate School of Medical Sciences, Kyushu University, Fukuoka, Japan  
SOURCE: Liver International (2005), 25(4), 829-838  
PUBLISHER: Blackwell Publishing Ltd.  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB The Rho-ROCK signaling pathways play an important role in the activation of hepatic stellate cells (HSCs). We investigated the effects of fasudil hydrochloride hydrate (fasudil), a Rho-kinase (ROCK) inhibitor, on cell growth, collagen production, and collagenase activity in HSCs. Rat HSCs and human HSC-derived TWNT-4 cells were cultured for studies on stress fiber formation and  $\alpha$ -smooth muscle actin ( $\alpha$ -SMA) expression. Proliferation was measured by BrdU incorporation, and apoptosis by TUNEL assay. The phosphorylation states of the MAP kinases (MAPKs), extra cellular signal-regulated kinase 1/2 (ERK1/2), c-jun kinase (JNK), and p38 were evaluated by western blot anal. Type I collagen, matrix metalloproteinase-1 (MMP-1) and tissue inhibitor of matrix metalloproteinase-1 (TIMP-1) production and gene expression were evaluated by ELISA and real-time PCR, resp. Collagenase activity (active MMP-1) was also evaluated. Fasudil (100  $\mu$ M) inhibited cell spreading, the formation of stress fibers, and expression of  $\alpha$ -SMA with concomitant suppression of cell growth, although it did not induce apoptosis. Fasudil inhibited phosphorylation of ERK1/2, JNK, and p38. Treatment with fasudil suppressed the production and transcription of collagen and TIMP, stimulated the production and transcription of MMP-1, and enhanced collagenase activity. These findings demonstrated that fasudil not only suppresses proliferation and collagen production but also increases collagenase activity.  
IT 105628-07-7, Fasudil hydrochloride  
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(fasudil hydrochloride hydrate suppressed proliferation and collagen production but increased collagenase activity in hepatic stellate cell in rat)  
RN 105628-07-7 CAPLUS  
CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]-, hydrochloride (1:1) (CA INDEX NAME)



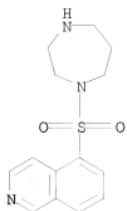
● HCl

REFERENCE COUNT:

43

THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L41 ANSWER 25 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
ACCESSION NUMBER: 2005:442152 CAPLUS  
DOCUMENT NUMBER: 143:278832  
TITLE: Rho-Kinase Inhibitor Improves Increased Vascular Resistance and Impaired Vasodilation of the Forearm in Patients With Heart Failure  
AUTHOR(S): Kishi, Takuuya; Hirooka, Yoshitaka; Masumoto, Akihiro; Ito, Koji; Kimura, Yoshikuni; Inokuchi, Kosuke; Tagawa, Tatsuya; Shimokawa, Hiroaki; Takeshita, Akira; Sunagawa, Kenji  
CORPORATE SOURCE: Department of Cardiovascular Medicine, Kyushu University Graduate School of Medical Sciences, Fukuoka, 812-8582, Japan  
SOURCE: Circulation (2005), 111(21), 2741-2747  
CODEN: CIRCAZ; ISSN: 0009-7322  
PUBLISHER: Lippincott Williams & Wilkins  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB Background: Rho-kinase is suggested to have an important role in enhanced vasoconstriction in animal models of heart failure (HF). Patients with HF are characterized by increased vasoconstriction and reduced vasodilator responses to reactive hyperemia and exercise. The aim of the present study was to examine whether Rho-kinase is involved in the peripheral circulation abnormalities of HF in humans with the Rho-kinase inhibitor fasudil. Methods and Results: Studies were performed in patients with HF (HF group, n=26) and an age-matched control group (n=26). Forearm blood flow was measured with a strain-gauge plethysmograph during intra-arterial infusion of graded doses of fasudil or sodium nitroprusside. Resting forearm vascular resistance (FVR) was significantly higher in the HF group than in the control group. The increase in forearm blood flow evoked by fasudil was significantly greater in the HF group than in the control group. The increased FVR was decreased by fasudil in the HF group toward the level of the control group. By contrast, FVR evoked by sodium nitroprusside was comparable between the 2 groups. Fasudil significantly augmented the impaired ischemic vasodilation during reactive hyperemia after arterial occlusion of the forearm in the HF group but not in the control group. Fasudil did not augment the increased FVR evoked by phenylephrine in the control group significantly. Conclusions: These results indicate that Rho-kinase is involved in increased FVR and impaired vasodilation of the forearm in patients with HF.  
IT 105628-07-7  
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(Rho-kinase inhibitor fasudil hydrochloride hydrate dose dependently increased blood flow, improved increased vascular resistance and augmented impaired ischemic vasodilation during reactive hyperemia in forearm of patient with heart failure)  
RN 105628-07-7 CAPLUS  
CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]-, hydrochloride (1:1) (CA INDEX NAME)



● HCl

REFERENCE COUNT:

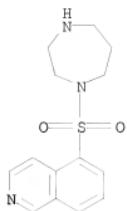
45

THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L41 ANSWER 26 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2005:164551 CAPLUS  
 DOCUMENT NUMBER: 142:329672  
 TITLE: Protective effects of hydrochloric fasudil on ischemia reperfusion injury in rat brain  
 AUTHOR(S): Tong, Huaiyu; Yu, Xinguang; Xu, Bainan  
 CORPORATE SOURCE: Department of Neurosurgery, General Hospital of Chinese PLA, Beijing, 100853, Peop. Rep. China  
 SOURCE: Zhongguo Linchuang Kangfu (2004), 8(16), 3157-3159  
 CODEN: ZLKHAH; ISSN: 1671-5926  
 PUBLISHER: Zhongguo Linchuang Kangfu Zazhishe  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB Hydrochloric fasudil, a new calcium antagonist, has strong effects of dilating vessels and protecting ischemic brain tissues. The effects of hydrochloric fasudil on ischemic reperfusion injury in rat brain as an intracellular calcium antagonist was studied. Thirty healthy SD rats (body mass 250-300 g) were treated with hydrochloric fasudil (n=15) or normal saline (n=15), resp., and cerebral ischemia models were made by using the suture method described by Haruo Nagasawa. Another 50 healthy SD rats (weighing 250-300 g) were selected to establish focal cerebral ischemia models by using the bypass technique described by Carys M Bannister, and then divided into 10 groups with 5 in each group to measure lactic acid content in ischemic brain tissue before ischemia, 60 min after ischemia, 20, 60, 120 min after reperfusion, resp. Rat middle cerebral artery occlusion (MCAO) ischemic reperfusion models were induced by suture method and bypass method. Fasudil or normal saline was given 30 min before ischemia resp. Regional cerebral blood flows (rCBF) 5 min, 60 min after ischemia and 30 min after reperfusion; neurul. function 3, 24, 48 h after operation; and lactic acid contents in brain tissues 20, 60, 120 min after reperfusion were measured. The rCBFs of fasudil group 5, 60 min after ischemia and 30 min after reperfusion were  $(3.11\pm0.02)$  mL/100 g per min,  $(3.60\pm0.02)$  mL/100 g per min,  $(8.04\pm0.10)$  mL/100 g per min, resp., and significantly higher than those of control group, which were  $(2.63\pm0.04)$ ,  $(3.17\pm1.29)$ ,  $(6.74\pm0.03)$  mL/100 g per min, resp. The neurul. functions of fasudil group were better than those of control group. The lactic acid contents of fasudil group 60min and 120 min after reperfusion [ $(7.2\pm0.3)$  mmol/kg and  $(7.4\pm0.2)$  mmol/kg, resp.] were significantly lower than those of control group [ $(10.2\pm0.3)$  mmol/kg and  $(10.0\pm0.3)$  mmol/kg, resp.]. The results indicated that hydrochloric fasudil can increase the rCBFs in ischemia models, accelerate the clearance of lactic acid and protect brain.

IT 105628-07-7  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (protective effects of hydrochloric fasudil on ischemia reperfusion injury in rat brain)  
 RN 105628-07-7 CAPLUS  
 CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]-, hydrochloride (1:1) (CA INDEX NAME)



● HCl

REFERENCE COUNT:

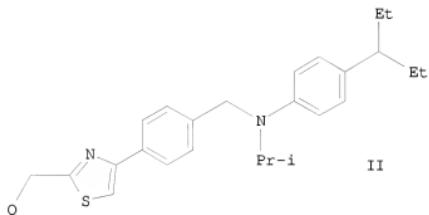
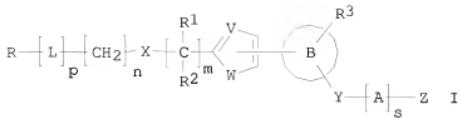
18

THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L41 ANSWER 27 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2004:878382 CAPLUS  
 DOCUMENT NUMBER: 141:350161  
 TITLE: Preparation of azole compounds as PTP1B inhibitors  
 INVENTOR(S): Ikemoto, Tomoyuki; Tanaka, Masahiro; Yuno, Takeo;  
 Sakamoto, Johei; Nakanishi, Hiroyuki; Nakagawa,  
 Yuichi; Ohta, Takeshi; Sakata, Shohei; Morinaga,  
 Hisayo  
 PATENT ASSIGNEE(S): Japan Tobacco Inc., Japan  
 SOURCE: PCT Int. Appl., 542 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004089918	A1	20041021	WO 2004-JP5119	20040409
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2004228565	A1	20041021	AU 2004-228565	20040409
CA 2521830	A1	20041021	CA 2004-2521830	20040409
EP 1553091	A1	20050713	EP 2004-726765	20040409
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
BR 2004009136	A	20060425	BR 2004-9136	20040409
CN 1780823	A	20060531	CN 2004-80009487	20040409
JP 3819415	B2	20060906	JP 2005-505323	20040409
ZA 2005008481	A	20070425	ZA 2005-8481	20040409
JP 2005272476	A	20051006	JP 2005-133755	20050428
US 20060122181	A1	20060608	US 2005-176846	20050707
NO 2005005246	A	20051221	NO 2005-5246	20051108
IN 2005CN02927	A	20070608	IN 2005-CN2927	20051109
PRIORITY APPLN. INFO.:			JP 2003-105267	A 20030409
			JP 2003-157590	A 20030603
			JP 2005-505323	A3 20040409
			WO 2004-JP5119	W 20040409

OTHER SOURCE(S): MARPAT 141:350161  
 GI



**AB** Title compds. I [ $V = N, CH; W = S, O; m = 0-2; R1, R2 = H, alkyl; X = NR4, etc.; R4 = H, alkyl; n = 0-4; p = 0, 1; L = CR20R21, etc.; R20 = H, alkyl, etc.; R21 = H, alkyl, etc.; R = CO2R19, etc.; R19 = H, alkyl; B = aryl, heteroaryl; R3 = H, halo, etc.; Y = O, etc.; s = 0, 1; A = (un)substituted alkylene with cycloalkyl; Z = cycloalkyl, etc.] were prepared. For example, O-alkylation of 5-hydroxynicotinic acid Me ester with compound II [ $Q = Cl$ ], e.g., prepared from 4-bromoacetylbenzoic acid in 5 steps, followed by saponification$

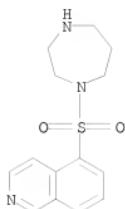
afforded compound II [3-carboxypyridin-5-yloxy] in 44.1% overall yield. In PTP1B (protein tyrosine phosphatase 1B) inhibition assays, the IC<sub>50</sub> value of compound II [ $Q = 3\text{-carboxypyridin-5-yloxy}$ ] was 0.28  $\mu\text{M}$ . Compds. I are claimed useful for the treatment of obesity, diabetes, etc. Formulations are given.

**IT** 103745-39-7, Fasudil

**RL:** THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(medicaments with; preparation of azole compds. as PTP1B inhibitors for treatment of obesity and diabetes)

**RN** 103745-39-7 CAPLUS

**CN** Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]- (CA INDEX NAME)

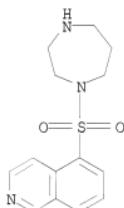


REFERENCE COUNT:

16

THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L41 ANSWER 28 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2004:684091 CAPLUS  
 DOCUMENT NUMBER: 142:225513  
 TITLE: Development of drug delivery system for intrathecal administration and its therapeutic effect on cerebral vasospasm and ischemia  
 AUTHOR(S): Ishida, Tatsuhiko  
 CORPORATE SOURCE: Department of Pharmacokinetics and Biopharmaceutics, The University of Tokushima, 1-78-1 Sho-machi, Tokushima, 770-8505, Japan  
 SOURCE: Yakugaku Zasshi (2004), 124(8), 541-548  
 CODEN: YKKZAJ; ISSN: 0031-6903  
 PUBLISHER: Pharmaceutical Society of Japan  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Japanese  
 AB To date, the pharmacol. approach to cerebral vasospasm and ischemia has been hampered in part by an inability to attain sufficiently high concns. of drugs in the cerebrospinal fluid (CSF). To overcome this limitation of current drug therapy, we have developed a sustained-release preparation of the protein kinase inhibitor fasudil. Exptl. cerebral vasospasm in rats and dogs was induced by double injection of autologous arterial blood into the cisterna magna. Focal cerebral ischemia in rats was induced by middle cerebral artery occlusion using an intraluminal suture technique. A single intrathecal injection of liposomal fasudil can maintain a therapeutic drug concentration in the CSF due to the sustained-release property of liposomes, significantly decreasing intarct size of acute ischemia and decreasing vasoconstriction of the basilar artery in cerebral vasospasm. This novel approach for the treatment of cerebral vasospasm and ischemia may have significant potential for use in the clin. setting.  
 IT 105628-07-7, Fasudil hydrochloride  
 RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (liposomal drug delivery system for intrathecal administration of fasudil and its therapeutic effect on cerebral vasospasm and ischemia)  
 RN 105628-07-7 CAPLUS  
 CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]-, hydrochloride (1:1) (CA INDEX NAME)



● HCl

L41 ANSWER 29 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2004:453055 CAPLUS  
 DOCUMENT NUMBER: 141:12315  
 TITLE: Remedy for glaucoma comprising Rho kinase inhibitor and  $\beta$ -blocker  
 INVENTOR(S): Hatano, Masakazu; Nakajima, Tadashi; Matsugi, Takeshi; Hara, Hideaki  
 PATENT ASSIGNEE(S): Santen Pharmaceutical Co., Ltd., Japan  
 SOURCE: PCT Int. Appl., 24 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004045644	A1	20040603	WO 2003-JP14559	20031117
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2506446	A1	20040603	CA 2003-2506446	20031117
AU 2003280812	A1	20040615	AU 2003-280812	20031117
JP 2004182723	A	20040702	JP 2003-386138	20031117
EP 1568382	A1	20050831	EP 2003-772800	20031117
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
CN 1711107	A	20051221	CN 2003-80103467	20031117
CN 1323719	C	20070704		
US 20060052367	A1	20060309	US 2005-535000	20050516
JP 2009029828	A	20090212	JP 2008-245694	20080925
PRIORITY APPLN. INFO.:				
(R)-(+)-N-(1H-pyrrolo[2,3-b]pyridin-4-yl)-4-(1-aminoethyl)benzamide dihydrochloride (I) in combination with timolol on ocular tension in rabbits was examined An eye drop containing I 0.1, timolol maleate 0.34, boric acid 0.2, concentrate glycerin 0.25, benzalkonium chloride 0.005 g, HCl/NaOH q.s., and water balance to 100 mL was formulated.				
IT 103745-39-7				
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)				

AB It is intended to establishing the usefulness as a remedy for glaucoma of a combination of an Rho kinase inhibitor, which has a novel function mechanism, with a  $\beta$ -blocker. By combining the Rho kinase inhibitor with the  $\beta$ -blocker, the effects of lowering ocular tension of these compds. can be complemented and/or potentiated each other. Concerning the administration form, they can be administered either combinedly or as a mixed preparation The effect of (R)-(+)-N-(1H-pyrrolo[2,3-b]pyridin-4-yl)-4-(1-aminoethyl)benzamide dihydrochloride (I) in combination with timolol on ocular tension in rabbits was examined An eye drop containing I 0.1, timolol maleate 0.34, boric acid 0.2, concentrate glycerin 0.25, benzalkonium chloride 0.005 g, HCl/NaOH q.s., and water balance to 100 mL was formulated.

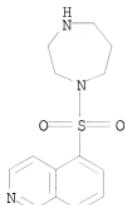
IT 103745-39-7

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(remedy for glaucoma comprising Rho kinase inhibitor and  
β-blocker)

RN 103745-39-7 CAPLUS

CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]- (CA INDEX  
NAME)



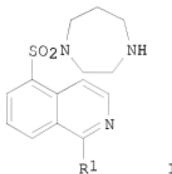
REFERENCE COUNT:

52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L41 ANSWER 30 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2004:450741 CAPLUS  
 DOCUMENT NUMBER: 141:1256  
 TITLE: Sudden death preventing agents containing isoquinolines  
 INVENTOR(S): Shimokawa, Hiroaki; Takeichi, Sanae  
 PATENT ASSIGNEE(S): Asahi Chemical Pharma Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004155661	A	20040603	JP 2002-320077	20021101
PRIORITY APPLN. INFO.:			JP 2002-320077	20021101

GI

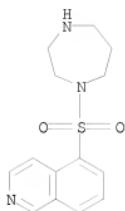


AB The agents contain isoquinolines I ( $R_1 = H, OH$ ), their acid addition salts, or hydrates. Intracoronary administration of 30  $\mu g$  I ( $R_1 = OH$ )/kg to swine prevented serotonin-induced contraction of coronary artery. An injection solution (2 mL) was formulated containing 10 mg I.HCl ( $R_1 = H$ ) and 16 mg NaCl.

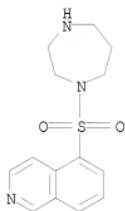
IT 103745-39-7 105628-07-7  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (sudden death preventing agents containing isoquinolines)

RN 103745-39-7 CAPLUS

CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]- (CA INDEX NAME)



RN 105628-07-7 CAPLUS  
CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]-, hydrochloride  
(1:1) (CA INDEX NAME)



● HCl

L41 ANSWER 31 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2004:203675 CAPLUS  
 DOCUMENT NUMBER: 140:223330  
 TITLE: Remedy for glaucoma comprising Rho kinase inhibitor and prostaglandins  
 INVENTOR(S): Nakajima, Tadashi; Matsugi, Takeshi; Hara, Hideaki  
 PATENT ASSIGNEE(S): Santen Pharmaceutical Co., Ltd., Japan  
 SOURCE: PCT Int. Appl., 21 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004019951	A1	20040311	WO 2003-JP11004	20030829
W: AB, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RU: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2496797	A1	20040311	CA 2003-2496797	20030829
AU 2003257588	A1	20040319	AU 2003-257588	20030829
JP 2004107335	A	20040408	JP 2003-305583	20030829
EP 1541151	A1	20050615	EP 2003-791404	20030829
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
CN 1684689	A	20051019	CN 2003-823302	20030829
US 20050245509	A1	20051103	US 2005-525986	20050225
PRIORITY APPLN. INFO.:			JP 2002-250223	A 20020829
			WO 2003-JP11004	W 20030829

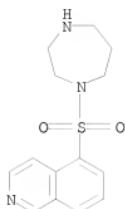
AB It is intended to find out the usefulness as a remedy for glaucoma of a combination of an Rho kinase inhibitor with prostaglandins. By combining an Rho kinase inhibitor with prostaglandins, their effects of lowering ocular tension are complemented and/or enhanced each other. Concerning the administration route, use may be made of either concomitant administration or administration as a blend preparation. For example, an eyedrop solution contained (R)-trans-N-(1H-pyrrolo[2,3-b]pyridin-4-yl)-4-(1-aminoethyl)benzamide dihydrochloride 0.3, isopropylunoprostone 0.06, boric acid 0.2, concentrated glycerin 0.25, benzalkonium chloride 0.05 g, diluted HCl q.s., NaOH q.s., and distilled water balance to 100 mL.

IT 103745-39-7

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (remedy for glaucoma comprising Rho kinase inhibitors and prostaglandins)

RN 103745-39-7 CAPLUS

CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]- (CA INDEX NAME)



REFERENCE COUNT:

17

THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L41 ANSWER 32 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2003:892612 CAPLUS  
 DOCUMENT NUMBER: 139:358813  
 TITLE: Methods using Rho-associated kinase (ROCK) pathway polypeptide modulators for modulating bladder smooth muscle contractility  
 INVENTOR(S): Chen, Zunxuan; Hu, Erding; Westfall, Timothy D.; Wibberley, Alexandria  
 PATENT ASSIGNEE(S): Smithkline Beecham Corporation, USA  
 SOURCE: PCT Int. Appl., 54 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003092687	A1	20031113	WO 2003-US13385	20030430
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003237131	A1	20031117	AU 2003-237131	20030430
EP 1503758	A1	20050209	EP 2003-736512	20030430
R: AI, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2005532305	T	20051027	JP 2004-500871	20030430
US 20050159333	A1	20050721	US 2004-513139	20041029
PRIORITY APPLN. INFO.:			US 2002-377504P	P 20020502
			WO 2003-US13385	W 20030430

AB A method for modulating bladder smooth muscle contractility comprises contacting a polypeptide in a ROCK pathway with a compound that modulates an activity of the polypeptide. Also disclosed are methods for treating lower urinary tract disorders and overactive bladder.

IT 105628-07-7

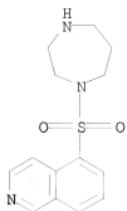
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

(Biological study); USES (Uses)

(Rho-associated kinase (ROCK) pathway polypeptide modulators for modulating bladder smooth muscle contractility)

RN 105628-07-7 CAPLUS

CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]-, hydrochloride (1:1) (CA INDEX NAME)



● HCl

REFERENCE COUNT:

2

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L41 ANSWER 33 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2003:242168 CAPLUS  
 DOCUMENT NUMBER: 138:248537  
 TITLE: Medicinal composition for prevention and treatment of cerebrovascular disorder and heart diseases  
 INVENTOR(S): Toshima, Yoshinori; Hitomi, Asako; Satoh, Shinichi; Ikegaki, Ichiro  
 PATENT ASSIGNEE(S): Asahi Kasei Kabushiki Kaisha, Japan  
 SOURCE: PCT Int. Appl., 30 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003024457	A1	20030327	WO 2002-JP7712	20020730
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002362390	A1	20030401	AU 2002-362390	20020730
EP 1426051	A1	20040609	EP 2002-751784	20020730
EP 1426051	B1	20080716		
R: AI, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
AT 401082	T	20080815	AT 2002-751784	20020730
JP 4194095	B2	20081210	JP 2003-528553	20020730
US 20040242565	A1	20041202	US 2004-488699	20040706
PRIORITY APPLN. INFO.:			JP 2001-274846	A 20010911
			WO 2002-JP7712	W 20020730

## OTHER SOURCE(S): MARPAT 138:248537

AB This document discloses a medicinal composition comprising: (a) an isoquinolinesulfonylhomopiperazine derivative (Markush structure given) and (b) at least one member selected from the group of acceptable drugs such as a cerebral vasodilator, vasodilator agent, brain-protective agent, cerebral metabolism activator, anticoagulant agent, platelet aggregation inhibitor, thrombolytic agent, agent for mental disorders, hypotensive drug, remedy for angina pectoris, diuretic agent, cardiotonic, antiarrhythmic agent, hyperlipidemia remedy, and immunosuppressant. The above composition is useful as a preventive or remedy for cerebrovascular disorders and heart diseases. Formulations are given.

IT 103745-39-7 105628-07-7

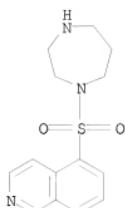
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (medicinal composition comprising isoquinolinesulfonylhomopiperazine derivative

and other therapeutic agent for prevention and treatment of cerebrovascular disorder and heart diseases)

RN 103745-39-7 CAPLUS

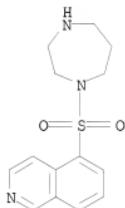
10/598,303

CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]- (CA INDEX NAME)



RN 105628-07-7 CAPLUS

CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]-, hydrochloride (1:1) (CA INDEX NAME)



● HCl

REFERENCE COUNT:

24

THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L41 ANSWER 34 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2002:444494 CAPLUS  
 DOCUMENT NUMBER: 137:28321  
 TITLE: Use of certain isoquinolinesulfonyl compounds for the treatment of glaucoma and ocular ischemia  
 INVENTOR(S): Hellberg, Mark R.; Kapin, Michael A.; Desantis, Louis M., Jr.  
 PATENT ASSIGNEE(S): Alcon Laboratories, Inc., USA  
 SOURCE: U.S., 11 pp., Cont.-in-part of U.S. Ser. No. 77,575.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6403590	B1	20020611	US 2001-919301	20010731
WO 9723222	A1	19970703	WO 1996-US20197	19961220
		W: AU, CA, CN, JP, KR, MX, US RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE		
US 6271224	B1	20010807	US 1999-77575	19990119
			US 1995-9351P	P 19951221
			WO 1996-US20197	W 19961220
			US 1999-77575	A2 19990119

PRIORITY APPLN. INFO.: MARPAT 137:28321

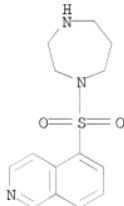
OTHER SOURCE(S): AB Isoquinolinesulfonyl compds. are used in ophthalmic compns. to treat glaucoma or other ischemic-borne ocular disorders, e.g. retinopathies or optic neuropathies. These compds. vasodilate ocular blood vessels, lower IOP and prevent or reduce the progression of visual field loss. Preparation and testing of 1-(5-isoquinolinesulfonyl)-2,5-dimethylpiperazine are described.

IT 103745-39-7, Fasudil 105628-07-7, Fasudil hydrochloride  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(isoquinolinesulfonyl compds. for treatment of glaucoma and ocular ischemia)

RN 103745-39-7 CAPLUS

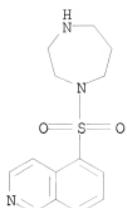
CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]- (CA INDEX NAME)



RN 105628-07-7 CAPLUS

10/598,303

CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]-, hydrochloride  
(1:1) (CA INDEX NAME)

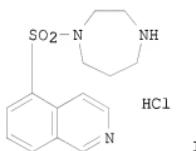


● HCl

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L41 ANSWER 35 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2001:10605 CAPLUS  
 DOCUMENT NUMBER: 134:66137  
 TITLE: Protein kinase N inhibitor comprising fasudil  
 INVENTOR(S): Ohashi, Yasuhiro; Konno, Yasuhiko; Miwa, Naoto  
 PATENT ASSIGNEE(S): Schering A.-G., Germany  
 SOURCE: Eur. Pat. Appl., 9 pp.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1064944	A1	20010103	EP 1999-250207	19990625
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
PRIORITY APPLN. INFO.: GI			EP 1999-250207	19990625



AB Protein kinase N inhibitor or a dual inhibitor of protein kinase N and p160ROCK comprises fasudil (I) or its salts, and pharmaceutical compns. for controlling carcinomatous peritonitis derived from intra-abdominal tumor are disclosed. An example is given showing that I-HCl controls carcinomatous peritonitis derived from intra-abdominal tumor.

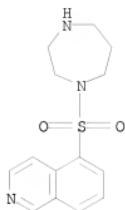
IT 103745-39-7, Fasudil 105628-07-7, Fasudil hydrochloride

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

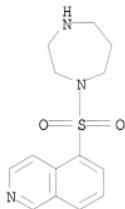
(protein kinase N inhibitor comprising fasudil)

RN 103745-39-7 CAPLUS

CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]- (CA INDEX NAME)



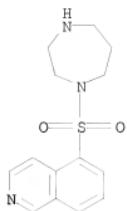
RN 105628-07-7 CAPLUS  
CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]-, hydrochloride  
(1:1) (CA INDEX NAME)



● HC1

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L41 ANSWER 36 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
ACCESSION NUMBER: 2000:510241 CAPLUS  
DOCUMENT NUMBER: 133:344445  
TITLE: Protein kinase inhibition by fasudil hydrochloride promotes neurological recovery after spinal cord injury in rats  
AUTHOR(S): Hara, Masahito; Takayasu, Masakazu; Watanabe, Kazuhiko; Noda, Atsushi; Takagi, Teruhide; Suzuki, Yoshio; Yoshida, Jun  
CORPORATE SOURCE: Department of Neurosurgery, Nagoya University School of Medicine, Nagoya, Japan  
SOURCE: Journal of Neurosurgery (2000), 93(1, Suppl.), 94-101  
PUBLISHER: American Association of Neurological Surgeons  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB In Japan fasudil hydrochloride (HA1077), a protein kinase inhibitor, is widely administered to prevent vasospasm in patients after subarachnoid hemorrhage. The effects of fasudil on exptl. spinal cord injury (SCI) were investigated and compared with those obtained using methylprednisolone. Spinal cord contusion was induced in rats by applying an aneurysm clip extradurally to the spinal cord at T-3 for 1 min. After injury three groups of rats were treated with i.v. administered saline (control), i.p. administered fasudil (10 mg/kg), or i.v. administered methylprednisolone (four 30 mg/kg injections). Neurrol. recovery was evaluated periodically over 1 mo by using a modified combined behavioral scale and histopathol. examination Leukocyte infiltration near the injury site was evaluated by measuring myeloperoxidase (MPO) activity at 24 h. Spinal cord blood flow was measured at intervals up to 3 h after injury by using laser Doppler flowmetry. In rats in the fasudil-treated group significant improvement in modified combined behavioral score was demonstrated at each time point, whereas in the methylprednisolone-treated rats no beneficial effects were shown. In the fasudil-treated group, reduction of traumatic spinal cord damage was evident histol. in the caudal portion of the injured areas, and tissue MPO activity in tissue samples was reduced. Spinal cord blood flow was not significantly different between fasudil-treated and control group rats. Fasudil hydrochloride showed promise of effectiveness in promoting neurol. recovery after traumatic SCI. Possible mechanisms of this effect include protein kinase inhibition and decreased infiltration by neutrophils.  
IT 105628-07-7, Fasudil hydrochloride  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(protein kinase inhibition by fasudil hydrochloride promotes neurol.  
recovery after spinal cord injury in rats)  
RN 105628-07-7 CAPLUS  
CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]-, hydrochloride  
(1:1) (CA INDEX NAME)



● HCl

REFERENCE COUNT:

49

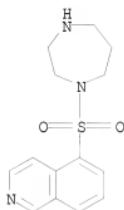
THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L41 ANSWER 37 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2000:133520 CAPLUS  
 DOCUMENT NUMBER: 132:171148  
 TITLE: Sustained release oral preparations of fasudil hydrochloride  
 INVENTOR(S): Sugi, Tomokazu; Nishio, Fumihide  
 PATENT ASSIGNEE(S): Asahi Kasei Kogyo K. K., Japan  
 SOURCE: PCT Int. Appl., 76 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000009133	A1	20000224	WO 1999-JP4196	19990804
W: CA, CN, JP, KR, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2334120	A1	20000224	CA 1999-2334120	19990804
CA 2334120	C	20061017		
CA 2553126	A1	20000224	CA 1999-2553126	19990804
EP 1110553	A1	20010627	EP 1999-935046	19990804
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
CN 100444843	C	20081224	CN 1999-808009	19990804
JP 4260370	B2	20090430	JP 2000-564636	19990804
TW 224967	B	20041211	TW 1999-88113576	19990809
US 6699508	B1	2004040302	US 2000-701833	20001205
US 20040131679	A1	20040708	US 2003-740441	20031222
US 7125567	B2	20061024		
US 20060280793	A1	20061214	US 2006-504025	20060815
PRIORITY APPLN. INFO.:			JP 1998-236606	A 19980810
			CA 1999-2334120	A3 19990804
			WO 1999-JP4196	W 19990804
			US 2000-701833	A3 20001205
			US 2003-740441	A1 20031222

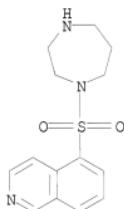
AB Disclosed are sustained release oral preps. containing at least one active ingredient selected from the group consisting of fasudil hydrochloride (I) and its hydrate. These preps. are characterized by containing at least one sustained release coated particle consisting of a core having surface and a film coating the surface of the core; the core containing the above-mentioned active ingredient(s) while the film containing a coating base and a specific insol. substance; and showing a specific elution ratio of the active ingredient(s) when tested by the elution method. By using these preps., the elution of the active ingredient(s) from the preps. can be surely controlled and the effects of the active ingredient(s) can be sustained over a long period of time, thereby relieving the burden loaded upon patients due to the administration of drugs and improving the compliance. Also disclosed is a method for evaluating sustained release oral preps. regarding the ability to release the active ingredient(s). I dissolved in distilled water was sprayed on Nonpareil-105 to obtain granules, i.e. I-coated Nonpareils. Et cellulose dissolved in ethanol was mixed with talc to give a coating solution, which was sprayed onto the above granules to give sustained-release granules. The granules were placed in capsules (containing 80 mg I/each).

IT 105628-07-7, Fasudil hydrochloride 186694-02-0  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(sustained release oral preps. of fasudil hydrochloride)  
RN 105628-07-7 CAPLUS  
CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]-, hydrochloride  
(1:1) (CA INDEX NAME)



● HCl

RN 186694-02-0 CAPLUS  
CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]-,  
hydrochloride, hydrate (2:2:1) (CA INDEX NAME)



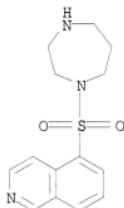
● HCl

● 1/2 H<sub>2</sub>O

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

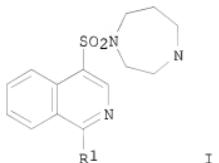
L41 ANSWER 38 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 1999:380689 CAPLUS  
 DOCUMENT NUMBER: 131:44852  
 TITLE: Preparation of 1-(5-isoquinolinesulfonyl)homopiperazine with the use of hydrophobic solvents  
 INVENTOR(S): Kawakubo, Hiroshi; Takahashi, Nobuyuki  
 PATENT ASSIGNEE(S): Asahi Chemical Industry Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11158177	A	19990615	JP 1997-325824	19971127
PRIORITY APPLN. INFO.:			JP 1997-325824	19971127
OTHER SOURCE(S): CASREACT 131:44852; MARPAT 131:44852				
AB The title compound (I) was prepared by reaction of 5-isoquinolinesulfonyl halides with homopiperazine in ethers or aromatic hydrocarbons. Thus, reaction of 5-isoquinolinesulfonyl chloride hydrochloride with homopiperazine in EtOAc gave 44% I.				
IT 103745-39-7P				
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation) (preparation of 1-(5-isoquinolinesulfonyl)homopiperazine using hydrophobic solvents)				
RN 103745-39-7	CAPLUS			
CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]-	(CA INDEX NAME)			



L41 ANSWER 39 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 1998:613750 CAPLUS  
 DOCUMENT NUMBER: 129:298397  
 ORIGINAL REFERENCE NO.: 129:60725a,60728a  
 TITLE: Isoquinoline derivatives for treatment of spinal cord injury  
 INVENTOR(S): Takayasu, Masakazu; Sato, Shinichi  
 PATENT ASSIGNEE(S): Asahi Chemical Industry Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 10251150	A	19980922	JP 1997-60319	19970314
JP 4011669	B2	20071121		
PRIORITY APPLN. INFO.:			JP 1997-60319	19970314
OTHER SOURCE(S):	MARPAT	129:298397		
GI				



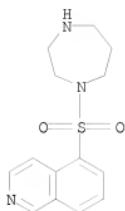
AB Isoquinoline derivs. (I; R1 = H or OH) and their salts are claimed for treatment of spinal cord injury. The efficacy of I against spinal injury was tested in animal models, and pharmaceutical injections and tablets of I were formulated.

IT 103745-39-7 105628-07-7

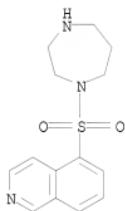
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (isoquinoline derivs. for treatment of spinal cord injury)

RN 103745-39-7 CAPLUS

CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]- (CA INDEX NAME)



RN 105628-07-7 CAPLUS  
CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]-, hydrochloride  
(1:1) (CA INDEX NAME)



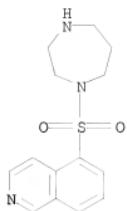
● HCl

L41 ANSWER 40 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 1998:222961 CAPLUS  
 DOCUMENT NUMBER: 128:303685  
 ORIGINAL REFERENCE NO.: 128:60016h,60017a  
 TITLE: Inhibition of human immunodeficiency virus type 1 replication by a bioavailable serine/threonine kinase inhibitor, fasudil hydrochloride  
 AUTHOR(S): Sato, Tsunee; Asamitsu, Kaori; Yang, Jian-Ping; Takahashi, Naoko; Tetsuka, Toshifumi; Yoneyama, Akihiko; Kanagawa, Akitaka; Okamoto, Takashi  
 CORPORATE SOURCE: Department of Molecular Genetics, Nagoya City University Medical School, Nagoya, 467, Japan  
 SOURCE: AIDS Research and Human Retroviruses (1998), 14(4), 293-298  
 CODEN: ARHRE7; ISSN: 0889-2229  
 PUBLISHER: Mary Ann Liebert, Inc.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB Replication of human immunodeficiency virus type 1 (HIV-1) is regulated by a host transcription factor, nuclear factor  $\kappa$ B (NF- $\kappa$ B). NF- $\kappa$ B belongs to a group of inducible transcription factors and its activity is regulated by multiple cellular signal transduction pathways, including kinases. These kinases are known to be involved in signal-induced NF- $\kappa$ B activation and in the induction of HIV-1 gene expression from latently infected cells. In this study the authors have examined the effect of a newly developed serine/threonine kinase inhibitor, fasudil hydrochloride (FH), on the replication of HIV-1. Although FH was initially developed as a compound that inhibited a myosin light chain kinase (MLCK) and had been approved for clin. use in the treatment of vasospasm after subarachnoid hemorrhage, this study shows its efficacy in blocking HIV-1 replication in latently infected patients. When FH was added to monocytic cell lines latently infected with HIV-1, U1 and OM10.1, the induction of HIV-1 replication by TNF- $\alpha$  was blocked at noncytotoxic doses. The IC50 values of HIV-1 induction by FH were 9.3 and 24  $\mu$ M for U1 and OM10.1, resp. Because FH could block TNF- $\alpha$ -induced, NF- $\kappa$ B-dependent gene expression, as examined by the transient luciferase expression assay, the effect of FH was considered to be due to the blocking of the signal transduction pathway of NF- $\kappa$ B activation. Although the in vivo effect of FH in blocking HIV-1 induction is not yet known, these findings indicate the feasibility of clin. use of FH and its derivs. in decreasing viral load to prevent clin. development of acquired immunodeficiency syndrome (AIDS) among HIV-1-infected individuals.

IT 105628-07-7, Fasudil hydrochloride  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (inhibition of human immunodeficiency virus type 1 replication by a bioavailable serine/threonine kinase inhibitor fasudil hydrochloride in relation to blockade of NF- $\kappa$ B signal transduction and AIDS treatment)

RN 105628-07-7 CAPLUS  
 CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]-, hydrochloride (1:1) (CA INDEX NAME)



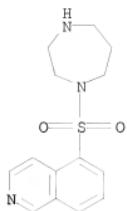
● HCl

REFERENCE COUNT:

34

THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L41 ANSWER 41 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
ACCESSION NUMBER: 1998:121231 CAPLUS  
DOCUMENT NUMBER: 128:252554  
ORIGINAL REFERENCE NO.: 128:49843a,49846a  
TITLE: Inhibition of HIV-1 Nef-induced apoptosis of uninfected human blood cells by serine/threonine protein kinase inhibitors, fasudil hydrochloride and M3  
AUTHOR(S): Okada, Harue; Takei, Ryouichi; Tashiro, Masato  
CORPORATE SOURCE: Shinjuku-ku, Toyama 1-23-1, Department of Virology 1, National Institute of Infectious Diseases, Tokyo, 162, Japan  
SOURCE: FEBS Letters (1998), 422(3), 363-367  
CODEN: FEBBLA; ISSN: 0014-5793  
PUBLISHER: Elsevier Science B.V.  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB The Nef protein of HIV-1 binds to and induces apoptotic cytolysis of uninfected but activated human peripheral blood mononuclear cells (PBMC) and various cell line cells derived from CD4+ T, CD8+ T and B lymphocytes, macrophages, and neutrophils. The Nef-induced apoptosis also occurs with blood cells not expressing CD95 (Fas). The Nef-induced apoptosis as well as Fas-mediated apoptosis was inhibited by acetyl-Try-Val-Ala-Asp-CHO, an IL-1 $\beta$  converting enzyme (ICE) inhibitor. Serine/threonine protein kinase (PK) inhibitors, H-7, fasudil hydrochloride and M3, inhibited the Nef-induced apoptosis, and not the Fas-mediated one, without affecting the cell-binding activity of Nef and Nef-binding capacity of the activated cells. Preincubation of the cells with the drugs before being bound by Nef was required for the inhibition of apoptosis. These results suggest that the PK inhibitors specifically act on a cellular protein involved in the upper stream of signal transduction pathway of the Nef-induced apoptosis, which is different from the Fas-mediated pathway but meets it upstream of ICE. In addition, the drugs suppressed the cellular activation-associated cell surface expression of a putative Nef-binding protein in PBMC, although they had no influence on its expression in cell line cells. These findings suggest the feasibility of clin. use of the PK inhibitors to prevent the development of AIDS by inhibiting the Nef-induced apoptosis of uninfected blood cells.  
IT 105628-07-7, Fasudil hydrochloride  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(inhibition of HIV-1 Nef-induced apoptosis of uninfected human blood cells by serine/threonine protein kinase inhibitors, fasudil hydrochloride and M3)  
RN 105628-07-7 CAPLUS  
CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]-, hydrochloride (1:1) (CA INDEX NAME)



● HCl

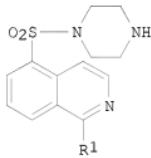
REFERENCE COUNT:

19

THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L41 ANSWER 42 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 1997:587119 CAPLUS  
 DOCUMENT NUMBER: 127:268019  
 ORIGINAL REFERENCE NO.: 127:52215a,52218a  
 TITLE: Fansudil and related compounds for improvement of motor activity in cerebral thrombosis  
 INVENTOR(S): Otomo, Eiichi; Morohoshi, Toshiro  
 PATENT ASSIGNEE(S): Asahi Chemical Industry Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

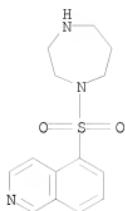
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09227381	A	19970902	JP 1996-42487	19960229
PRIORITY APPLN. INFO.:			JP 1996-42487	19960229
OTHER SOURCE(S):	MARPAT	127:268019		
GI				



AB Use of Fansudil and related compds. (I) [ R1 = H or OH] for the improvement of motor activity in patients with cerebral thrombosis is claimed. Injection solns. were formulated containing Fansudil-Fansudil-HCl 10, NaCl 16 and distilled water to 2 mL.

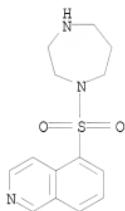
IT 103745-39-7, Fansudil 105628-07-7, Fansudil hydrochloride  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (Fansudil and related compds. for improvement of motor activity in cerebral thrombosis)

RN 103745-39-7 CAPLUS  
 CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]- (CA INDEX NAME)



RN 105628-07-7 CAPLUS

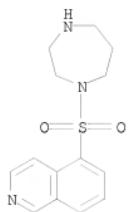
CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]-, hydrochloride  
(1:1) (CA INDEX NAME)



● HCl

L41 ANSWER 43 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 1997:526102 CAPLUS  
 DOCUMENT NUMBER: 127:220471  
 ORIGINAL REFERENCE NO.: 127:42965a  
 TITLE: Preparation of nitro compounds for treatment of angina pectoris and for prevention of restenosis after percutaneous transluminal coronary angioplasty  
 INVENTOR(S): Uchida, Yasuyoshi; Koga, Hiroshi; Ko, Naoki  
 PATENT ASSIGNEE(S): Chugai Pharmaceutical Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 30 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09202764	A	19970805	JP 1996-43976	19960124
PRIORITY APPLN. INFO.:			JP 1996-43976	19960124
OTHER SOURCE(S):	MARPAT 127:220471			
AB	R1AR2GR3ONO2 [R1 = (un)substituted Ph, naphthyl, anthryl, other aromatic hydrocarbyl, (un)substituted pyridyl, quinolyl, isoquinolyl, carbazolyl, indolyl, other heterocyclyl; A = SO <sub>2</sub> , O, S, (N-substituted) sulfonamido, amido, thioamido, cyanamido; R2 = C1-10 hydrocarbyl; G = SO <sub>2</sub> , O, S, (N-substituted) sulfonamido, amido, thioamido, cyanamido, amino, cyclic amino; R3 = (un)substituted C1-18 hydrocarbyl (linked via hetero atom)] or their pharmaceutically acceptable salts are prepared Mesylation of 3.0 g 5-chloro-N-(6-hydroxyhexyl)-1-naphthalenesulfonamide in CH <sub>2</sub> Cl <sub>2</sub> in the presence of 4-dimethylaminopyridine at room temperature for 2.5 h gave 3.54 g 5-chloro-N-(6-methanesulfonyloxyhexyl)-1-naphthalenesulfonamide, which (1.77 g) was treated with 1.01 mL 2-aminoethanol in THF at 70° for 27 h to afford 920 mg 5-chloro-N-[6-(2-hydroxyethylamino)hexyl]-1-naphthalenesulfonamide. The product (200 mg) was treated with urea, fuming HNO <sub>3</sub> , and Ac <sub>2</sub> O in CH <sub>2</sub> Cl <sub>2</sub> at room temperature for 4 h to give 60 mg 5-chloro-N-[6-(2-nitrooxyethylamino)hexyl]-1-naphthalenesulfonamide nitrate, which at 10-5 M inhibited 52% proliferation of rat vascular smooth muscle cells (A7r5 cells).			
IT	103745-39-7			
RL:	RCT (Reactant); RACT (Reactant or reagent) (preparation of antianginal nitro compds.)			
RN	103745-39-7 CAPLUS			
CN	Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]- (CA INDEX NAME)			



L41 ANSWER 44 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 1997:503173 CAPLUS  
 DOCUMENT NUMBER: 127:126664  
 ORIGINAL REFERENCE NO.: 127:24317a  
 TITLE: Pharmaceutical compositions containing isoquinolinesulfonyl derivatives for the treatment of glaucoma and ocular ischemia  
 INVENTOR(S): Kapin, Michael A.; Desantis, Louis M., Jr.  
 PATENT ASSIGNEE(S): Alcon Laboratories, Inc., USA; Kapin, Michael A.; Desantis, Louis M., Jr.  
 SOURCE: PCT Int. Appl., 27 pp.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9723222	A1	19970703	WO 1996-US20197	19961220
W: AU, CA, CN, JP, KR, MX, US				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2240271	A1	19970703	CA 1996-2240271	19961220
CA 2240271	C	20051213		
AU 9714644	A	19970717	AU 1997-14644	19961220
AU 720326	B2	20000525		
EP 868186	A1	19981007	EP 1996-945220	19961220
EP 868186	B1	20050302		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
CN 1207680	A	19990210	CN 1996-199673	19961220
CN 1155383	C	20040630		
JP 2001509780	T	20010724	JP 1997-523793	19961220
JP 3719609	B2	20051124		
AT 289815	T	20050315	AT 1996-945220	19961220
ES 2238702	T3	20050901	ES 1996-945220	19961220
TW 534814	B	20030601	TW 1997-86101346	19970204
TW 253345	B	20060421	TW 2003-92104976	19970204
US 6271224	B1	20010807	US 1999-77575	19990119
HK 1015691	A1	20050520	HK 1999-100710	19990227
US 6403590	B1	20020611	US 2001-919301	20010731
PRIORITY APPLN. INFO.:			US 1995-9351P	P 19951221
			WO 1996-US20197	W 19961220
			US 1999-77575	A2 19990119

## OTHER SOURCE(S): MARPAT 127:126664

AB Isoquinolinesulfonyl compds. (Markush structure given) are used in ophthalmic compns. to treat glaucoma or other ischemic-borne ocular disorders such as retinopathies or optic neuropathies. These compds. vasodilate ocular blood vessels, lower intraocular pressure and prevent or reduce the progression of visual field loss. Topical administration of 150 $\mu$ g fasudil hydrochloride (I) to rabbits eyes decreased the intraocular pressure by 14.6% after 1 h. An eye drop contain I 1.5, benzalkonium chloride 0.01, and phosphate buffered saline q.s. 100%.

IT 103745-39-7, Fasudil 105628-07-7, Fasudil hydrochloride

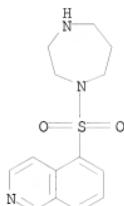
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

10/598,303

(pharmaceutical compns. containing isoquinolinesulfonyl derivs. for treatment of glaucoma and ocular ischemia)

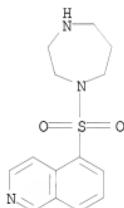
RN 103745-39-7 CAPLUS

CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]- (CA INDEX NAME)



RN 105628-07-7 CAPLUS

CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]-, hydrochloride (1:1) (CA INDEX NAME)



● HCl

REFERENCE COUNT:

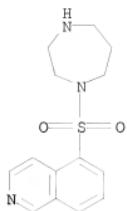
2

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L41 ANSWER 45 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 1997:259764 CAPLUS  
 DOCUMENT NUMBER: 126:4242891  
 ORIGINAL REFERENCE NO.: 126:46901a,46904a  
 TITLE: Mucosal preparation containing physiologically active peptide  
 INVENTOR(S): Yamamoto, Nakayuki; Ito, Teruomi  
 PATENT ASSIGNEE(S): Asahi Kasei Kogyo Kabushiki Kaisha, Japan; Hisamitsu Seiyaku Kabushiki Kaisha; Yamamoto, Nakayuki; Ito, Teruomi  
 SOURCE: PCT Int. Appl., 48 pp.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9706813	A1	19970227	WO 1996-JP2277	19960812
W: CA, CN, JP, KR, US				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
JP 11292787	A	19991026	JP 1995-208010	19950815
CN 1179723	A	19980422	CN 1996-192821	19960812
EP 845265	A1	19980603	EP 1996-926626	19960812
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 3824023	B2	20060920	JP 1997-509140	19960812
PRIORITY APPLN. INFO.:			JP 1995-208010	A 19950815
			WO 1996-JP2277	W 19960812

OTHER SOURCE(S): MARPAT 126:242891  
 AB This invention related to a mucosal preparation obtained by blending a physiol. active peptide at least with a sorbefacient and a vasodilatory compound. Owing to the combined use of the sorbefacient with the vasodilatory compound, the absorption of any desired physiol. active peptide can be enhanced and thus it can be self-administered to a patient without giving any pain caused by parenteral injection. Therefore, it is highly useful as a preparation of a physiol. active peptide for prolonged administration. As the physiol. active peptide, use can be made of insulin, calcitonin, human PTH, somatostatin, glucagon, etc. As the sorbefacient, use can be made of bile acid salts, cyclodextrin, phospholipids, nonionic surfactants, higher fatty acids, etc. As the vasodilatory compds., use can be made of calcium channel inhibitors, prostaglandin E1, isosorbide nitrate, nitroglycerin, etc.  
 IT 105628-07-7, Fasudil hydrochloride  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (sorbefacient and vasodilatory compound in mucosal preparation containing physiol.  
 active peptide)  
 RN 105628-07-7 CAPLUS  
 CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]-, hydrochloride  
 (1:1) (CA INDEX NAME)



● HCl

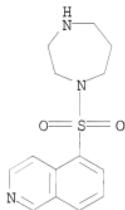
REFERENCE COUNT:

6

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L41 ANSWER 46 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 1997:203921 CAPLUS  
 DOCUMENT NUMBER: 126:203702  
 ORIGINAL REFERENCE NO.: 126:39303a,39306a  
 TITLE: Stable fasudil hydrochloride injection solutions in ampules or syringes  
 INVENTOR(S): Yamada, Hitoshi; Tsurugatani, Moryuki; Hiramatsu, Keiko  
 PATENT ASSIGNEE(S): Asahi Chemical Ind, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09024085	A	19970128	JP 1995-175010	19950711
JP 3879940	B2	20070214		
PRIORITY APPLN. INFO.:	JP 1995-175010 19950711			
AB	Fasudil hydrochloride injection solns. are filled into ampules or syringes having ≤10% transmissivity for 350 nm light to stabilize the contents.			
IT	105628-07-7, Fasudil hydrochloride RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (stable fasudil hydrochloride injections in ampules or syringes)			
RN	105628-07-7 CAPLUS			
CN	Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]-, hydrochloride (1:1) (CA INDEX NAME)			

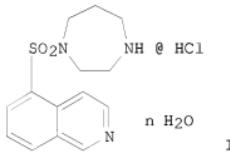


● HC1

L41 ANSWER 47 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 1997:141151 CAPLUS  
 DOCUMENT NUMBER: 126:157526  
 ORIGINAL REFERENCE NO.: 126:30467a,30470a  
 TITLE: Preparation of 1-(5-isoquinolinesulfonyl)homopiperazine hydrochloride hydrates as vasodilators  
 INVENTOR(S): Kawakubo, Hiromu; Ohno, Masaru  
 PATENT ASSIGNEE(S): Asahi Kasei Kogyo Kabushiki Kaisha, Japan  
 SOURCE: PCT Int. Appl., 29 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9702260	A1	19970123	WO 1996-JP1698	19960619
W: CN, KR, US				
RW: AT, BE, CH, JP 09071582	DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE	A 19970318	JP 1996-147147	19960610
JP 2899953	B2	19990602		
CN 1183782	A	19980603	CN 1996-193768	19960619
CN 1080721	C	20020313		
EP 870767	A1	19981014	EP 1996-918854	19960619
EP 870767	B1	20000216		
R: CH, DE, ES, FR, GB, IT, LI, NL, SE				
ES 2142065	T3	20000401	ES 1996-918854	19960619
US 5942505	A	19990824	US 1997-930910	19971014
HK 1013598	A1	20000721	HK 1998-112655	19981202
PRIORITY APPLN. INFO.:			JP 1995-167460	A 19950703
			WO 1996-JP1698	W 19960619

GI



AB The title compds. (I; n = 0.5-3) containing 2.5-15.5 weight% of water are prepared

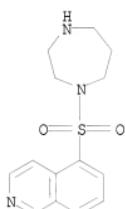
Compared with anhydrous 1-(5-isoquinolinesulfonyl)homopiperazine.HCl I has excellent molding characteristics. Thus, it can be shaped into tablets having a sufficient hardness even under a relatively low tableting pressure. The low tableting pressure brings about large advantages, namely, the good elution properties of the tablets, prevention of a mortar

and a pestle from being worn away due to the friction between them in the tabletting step, etc.

IT 105628-07-7P, 1-(5-Isoquinolinesulfonyl)homopiperazine hydrochloride 186694-02-0P  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of 1-(5-isoquinolinesulfonyl)homopiperazines hydrochloride hydrates as vasodilators)

RN 105628-07-7 CAPLUS

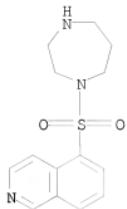
CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]-, hydrochloride (1:1) (CA INDEX NAME)



● HCl

RN 186694-02-0 CAPLUS

CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]-, hydrochloride, hydrate (2:2:1) (CA INDEX NAME)



● HCl

● 1/2 H<sub>2</sub>O

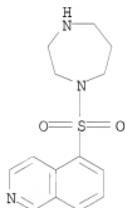
REFERENCE COUNT:

6

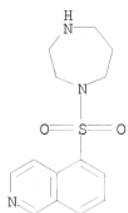
THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L41 ANSWER 48 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 1997:140974 CAPLUS  
 DOCUMENT NUMBER: 126:171619  
 ORIGINAL REFERENCE NO.: 126:33169a,33172a  
 TITLE: Preparation of 1-(5-isquinolinesulfonyl)homopiperazine hydrochloride trihydrate  
 INVENTOR(S): Kawakubo, Hiroshi; Sugi, Tomokazu  
 PATENT ASSIGNEE(S): Asahi Chemical Ind, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09012573	A	19970114	JP 1995-163341	19950629
JP 3734531	B2	20060111		
PRIORITY APPLN. INFO.:			JP 1995-163341	19950629
AB	1-(5-Isoquinolinesulfonyl)homopiperazine hydrochloride trihydrate (I), useful for the treatment of cerebral ischemia (no data), is prepared 1-(5-Isoquinolinesulfonyl)homopiperazine hydrochloride was recrystd. from water to give crystals of I. Tablets containing I with high hardness were obtained using low tabletting pressure.			
IT	103745-39-7P, Fasudil 105628-07-7P, Fasudil hydrochloride			
RL	SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)			
	(preparation of isoquinolinesulfonylhomopiperazine hydrochloride trihydrate)			
RN	103745-39-7 CAPLUS			
CN	Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]- (CA INDEX NAME)			

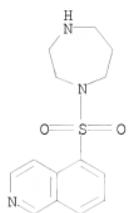


RN 105628-07-7 CAPLUS  
 CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]-, hydrochloride (1:1) (CA INDEX NAME)



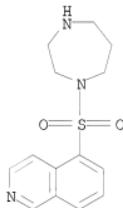
● HCl

L41 ANSWER 49 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
ACCESSION NUMBER: 1996:638487 CAPLUS  
DOCUMENT NUMBER: 125:265902  
ORIGINAL REFERENCE NO.: 125:49373a,49376a  
TITLE: Evaluation of fasudil hydrochloride treatment for wandering symptoms in cerebrovascular dementia with 31P-magnetic resonance spectroscopy and Xe-computed tomography  
AUTHOR(S): Kamei, S.; Oishi, M.; Takasu, T.  
CORPORATE SOURCE: School Medicine, Nihon University, Tokyo, 173, Japan  
SOURCE: Clinical Neuropharmacology (1996), 19(5), 428-438  
CODEN: CLNEDB; ISSN: 0362-5664  
PUBLISHER: Lippincott-Raven  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB This is the first report on the evaluation of treatment with fasudil hydrochloride, a novel intracellular calcium antagonist, for wandering symptoms in patients with cerebrovascular dementia by using 31P-magnetic resonance spectroscopy (MRS) and Xe-computed tomog. (CT). The subjects studied were two patients with cerebrovascular dementia who had had frequent wandering episodes. The clin. diagnosis was Binswanger-type cerebral infarction in patient 1 and sequelae of cerebral bleeding and multiple lacunar infarction in patient 2. Treatment with fasudil at 30 or 60 mg/day was given orally for 8 wk. The wandering symptoms disappeared in both patients during the treatment and reappeared a few days after discontinuation of the treatment. Mental tests indicated that memory was mildly improved during the treatment. Pretreatment 31P-MRS findings revealed decreases in relative signal intensities of phosphomonoester and phosphodiesters and an increase in that of mean adenosine triphosphates. After treatment, these findings disappeared. The regional cerebral blood flow values by Xe-CT in both patients did not show significant changes from before treatment to the values after treatment. These results suggest that the efficacy of fasudil for the wandering symptoms and mental function observed in our patients may have been related to a direct effect on intracellular energy metabolism  
IT 105628-07-7, Fasudil hydrochloride  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
    (fasudil hydrochloride treatment of wandering symptoms in cerebrovascular dementia with 31P-magnetic resonance spectroscopy and Xe-computed tomog.)  
RN 105628-07-7 CAPLUS  
CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]-, hydrochloride (1:1) (CA INDEX NAME)



● HCl

L41 ANSWER 50 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 1996:574266 CAPLUS  
 DOCUMENT NUMBER: 125:264822  
 ORIGINAL REFERENCE NO.: 125:49105a,49108a  
 TITLE: Development of fasudil hydrochloride (Eril). A new protein kinase inhibitor  
 AUTHOR(S): Sone, Takanori  
 CORPORATE SOURCE: Inst. Life Sci. Res., Asahi Chem. Ind. Co., Ltd., Shizuoka, 410-23, Japan  
 SOURCE: Yuki Gosei Kagaku Kyokaishi (1996), 54(9), 794-800  
 CODEN: YGKKAЕ; ISSN: 0037-9980  
 PUBLISHER: Yuki Gosei Kagaku Kyokai  
 DOCUMENT TYPE: Journal; General Review  
 LANGUAGE: Japanese  
 AB A review with 26 refs. A series of isoquinolinesulfonamide derivs. were shown to possess vasodilatory action. 1-(5-Isoquinolinesulfonyl)homopiperazine hydrochloride (fasudil) had more potent vasodilatory effect to vertebral artery than diltiazem. Fasudil inhibits protein kinase and dilates spastic cerebral arteries in the canine hemorrhage model. In clin. studies with fasudil, administered by i.v. injection to patients who had undergone surgery for subarachnoid hemorrhage, significantly reduced the occurrence of vasospasm.  
 IT 105628-07-7P, Eril  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (development of fasudil as vasodilator and protein kinase inhibitor)  
 RN 105628-07-7 CAPLUS  
 CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]-, hydrochloride (1:1) (CA INDEX NAME)



● HCl

L41 ANSWER 51 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 1996:228585 CAPLUS  
 DOCUMENT NUMBER: 124:250901  
 ORIGINAL REFERENCE NO.: 124:46217a, 46220a  
 TITLE: Combination drug with immunosuppressive,  
       cardiovascular, and cerebral activity  
 INVENTOR(S): Schoenharting, Martin; Muellner, Stefan; Zabel, Peter  
 PATENT ASSIGNEE(S): Hoechst A.-G., Germany  
 SOURCE: Ger. Offen., 11 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4430128	A1	19960229	DE 1994-4430128	19940825
WO 9605838	A2	19960229	WO 1995-EP3125	19950807
WO 9605838	A3	19960411		
W: AU, CA, CN, CZ, FI, HU, JP, KR, MX, NO, PL, RU, SI, UA, US RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9533829	A	19960314	AU 1995-33829	19950807
AU 697311	B2	19981001		
EP 777482	A1	19970611	EP 1995-930441	19950807
EP 777482	B1	20011114		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
JP 10504550	T	19980506	JP 1995-507740	19950807
AT 208620	T	20011115	AT 1995-930441	19950807
ES 2162937	T3	20020116	ES 1995-930441	19950807
FI 9700747	A	19970221	FI 1997-747	19970221
US 5990103	A	19991123	US 1997-793417	19970225
US 6337325	B1	20020108	US 1999-357230	19990720
PRIORITY APPLN. INFO.:			DE 1994-4430128	A 19940825
			WO 1995-EP3125	W 19950807
			US 1997-793417	A1 19970225

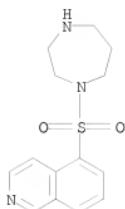
AB A combination of a phosphodiesterase inhibitor or adenylate cyclase activator which elevates the intracellular cAMP content with a compound which lowers the effective intracellular Ca<sup>2+</sup> content, administered simultaneously, sep., or at timed intervals, shows synergistic enhancement of immunosuppressive, cardiovascular, and cerebral activity. Thus, dibutyryl cAMP and the Ca<sup>2+</sup> channel blocker nifedipine synergistically inhibited release of interleukin 2 and  $\gamma$ -interferon by phytohemagglutinin-activated human peripheral blood mononuclear cells.

IT 103745-39-7, HA 1077

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (combination drug with immunosuppressive, cardiovascular, and cerebral activity)

RN 103745-39-7 CAPLUS

CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]- (CA INDEX NAME)



REFERENCE COUNT:

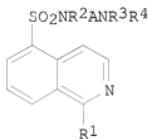
5

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L41 ANSWER 52 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 1995:528917 CAPLUS  
 DOCUMENT NUMBER: 122:27411  
 ORIGINAL REFERENCE NO.: 122:49841a, 49844a  
 TITLE: Antiinflammatory agents containing isoquinolinesulfonamides  
 INVENTOR(S): Yamamoto, Yasuhiro; Sasaki, Taiji; Nozawa, Ryuji  
 PATENT ASSIGNEE(S): Asahi Chemical Ind, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07041424	A	19950210	JP 1993-185734	19930728
PRIORITY APPLN. INFO.:			JP 1993-185734	19930728

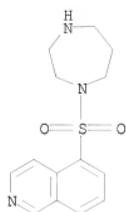
GI



AB Antiinflammatory agents contain substituted isoquinolinamides I (R1 = H, Cl, OH; when R1 = H, A = unsubstituted C2-6 alkylene, C2-6 alkylene in which H bound to C is substituted with C1-10 alkyl, aryl, or aralkyl; R2 = H; R3 = H, C1-6 linear or branched alkyl, aryl, aralkyl; R4 = H, C1-6 linear or branched alkyl, aryl, aralkyl, benzoyl, cinnamyl, cinnamoyl, furoyl, PhCH(OR5)CH2 (R5 = C1-6 linear or branched alkyl), C:(NR6)NHR7 (R6, R7 = H; R6R7 may form C2-4 alkylene); R2R3 may form (C1-10 alkyl-, Ph-, or benzyl-substituted) C≤4 alkylene; NR3R4 may form (O-containing) heterocyclyl; when R1 = Cl or OH, A = unsubstituted C2-6 alkylene, C2-6 alkylene in which H bound to C is substituted with C1-6 alkyl; R2, R3 = H, C1-6 linear or branched alkyl; R2R3 may form ethylene in which H atom bound to C may be substituted with C1-6 alkyl, trimethylene; R4 = H, C1-6 alkyl, amidino) or their salts as active ingredients.  
 1-(5-Isoquinolinesulfonyl)homopiperazine-HCl salt (II) inhibited phorbol ester-induced O2- production by human leukocytes with 50% inhibitory concentration of 15 μM. II showed LD50 of 300 mg/kg p.o. in mice. Tablets containing II 30, crystalline cellulose 40, lactose 103, Mg stearate 2, and CM-cellulose Ca 5 mg were formulated.

IT 105628-07-7, 1-(5-Isoquinolinesulfonyl)homopiperazine hydrochloride  
 RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

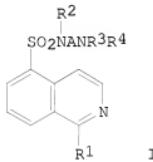
(antiinflammatory agents containing substituted isoquinolinesulfonamides)  
RN 105628-07-7 CAPLUS  
CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]-, hydrochloride  
(1:1) (CA INDEX NAME)



● HCl

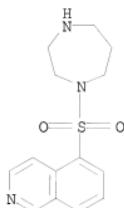
L41 ANSWER 53 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 1994:418054 CAPLUS  
 DOCUMENT NUMBER: 121:18054  
 ORIGINAL REFERENCE NO.: 121:3319a,3322a  
 TITLE: Preparation of isoquinolinesulfonamides as platelet aggregation inhibitors  
 INVENTOR(S): Seto, Minoru; Sato, Tae  
 PATENT ASSIGNEE(S): Asahi Kasei Kogyo K. K., Japan  
 SOURCE: PCT Int. Appl., 40 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9405290	A1	19940317	WO 1993-JP1209	19930827
W: CA, FI, KR, RW: AT, BE, CH, JP 06080569	US	DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE	JP 1992-235841	19920903
	A	19940322	JP 1992-235841	A 19920903
PRIORITY APPLN. INFO.:				
OTHER SOURCE(S):	MARPAT	121:18054		
GI				



AB A platelet aggregation inhibitor, useful as antithrombotics, contains an isoquinolinesulfonamide derivative [I; R1 = H, Cl, OH; when R1 = H, A = C1-6 alkylene which may be substituted by alkyl, cinnamyl, Ph, benzyl; R2 = H, C≤6 cycloalkyl; R3 = H, linear or branched C1-6 alkyl, cinnamyl, Ph, benzyl, or alternatively R2 and R3 may be combined together to represent C≤4 alkylene; R4 = H, linear or branched alkyl C1-6 alkyl, Ph, benzyl, Bz, cinnamyl, cinnamoyl, furoyl, CH2CH(OR5)Ph, C(:NR6)NHR7, or alternatively R4 may be bonded to R3 directly or through O atom to form together the N atom a 5- to 6-membered heterocyclic ring; R5 = C1-6 alkyl; R6, R7 = H, Me, or alternatively R6 and R7 may be combined together to represent C2-4 alkylene] or a salt thereof is described. 1-(5-Isoquinolinesulfonyl)homopiperazine hydrochloride (II) showed IC50 of 20 μM for inhibiting human blood platelet aggregation induced by ADP and 9,11-dioxy-9α,11α-(methaneoepoxy)prostaglandin F2α (U-46619). Tablets were formulated each containing II 30, crystalline cellulose 40, lactose 103, Mg stearate 2, and CM-cellulose Ca salt 5 mg. IT 105628-07-7, 1-(5-Isoquinolinesulfonyl)homopiperazine hydrochloride

RL: BIOL (Biological study)  
(blood platelet aggregation inhibitor containing)  
RN 105628-07-7 CAPLUS  
CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]-, hydrochloride  
(1:1) (CA INDEX NAME)



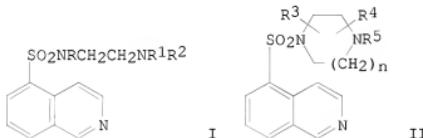
● HCl

REFERENCE COUNT:

7

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L41 ANSWER 54 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 1992:255586 CAPLUS  
 DOCUMENT NUMBER: 116:255586  
 ORIGINAL REFERENCE NO.: 116:43339a,43342a  
 TITLE: 5-Isoquinolinesulfonamide derivatives. III.  
 Synthesis and vasodilatory activity of  
 1-(5-isooquinolinesulfonyl)piperazine derivatives  
 AUTHOR(S): Morikawa, Anri; Sone, Takanori; Asano, Toshio  
 CORPORATE SOURCE: Life-Sci. Inst., Asahi Chem. Ind. Co., Ltd., Nobeoka,  
 882, Japan  
 SOURCE: Chemical & Pharmaceutical Bulletin (1992), 40(3),  
 770-3  
 DOCUMENT TYPE: CPBTAL; ISSN: 0009-2363  
 LANGUAGE: Journal  
 English  
 OTHER SOURCE(S): CASREACT 116:255586  
 GI



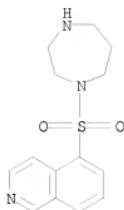
AB On the basis of a hypothesis that cyclization and alkylation of the diamine part of aminoalkylisoquinolinesulfonamides, e.g., I (R, R<sub>1</sub>, R<sub>2</sub> = H, alkyl), would give highly active compds., a new series of 5-isooquinolinesulfonamide derivs., II (R<sub>3</sub> = H, 2-, 3-Me; R<sub>4</sub> = H, 3-, 5-Me; R<sub>5</sub> = H, alkyl, aryl, n = 1,2) were prepared from cyclic diamines. Their vasodilating effects were subsequently evaluated *in vivo* according to the increase in arterial blood flow after injection locally into the femoral and/or vertebral arteries of dogs. Cyclization of the diamine structure in I gave very potent vasodilators II [R<sub>3</sub>-R<sub>5</sub> = H; n = 1 (III), 2 (IV)]. Acylation and sulfonylation of the terminal amino nitrogen afforded much less potent compds. In contrast to the hypothesis, alkylation on the ring carbon and the terminal nitrogen of the cyclic amine afforded less active compds. except for II (R<sub>3</sub> = 2-Me, R<sub>4</sub> = 5-Me, R<sub>5</sub> = H, n = 2) (V). The most active compds., III IV and V showed more potent vasodilating effects and more selective activity in the vertebral artery than either trapidil or diltiazem.

IT 103745-39-7P

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and vasodilating activity of)

RN 103745-39-7 CAPLUS

CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]- (CA INDEX NAME)



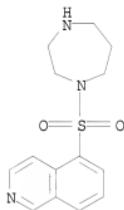
IT 105628-07-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation, acylation, and vasodilating activity of)

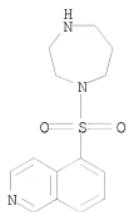
RN 105628-07-7 CAPLUS

CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]-, hydrochloride (1:1) (CA INDEX NAME)



● HCl

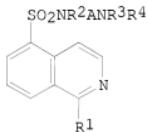
L41 ANSWER 55 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
ACCESSION NUMBER: 1992:99115 CAPLUS  
DOCUMENT NUMBER: 116:99115  
ORIGINAL REFERENCE NO.: 116:16533a,16536a  
TITLE: Effects of HA1077, an intracellular calcium antagonist, on neurotransmitter metabolism in rat brain *in vivo*  
AUTHOR(S): Kondoh, Yasushi; Mizusawa, Shigenori; Murakami, Matsutaro; Nagata, Ken; Nakamichi, Hiroyuki; Watanabe, Katsuhiro  
CORPORATE SOURCE: Dep. Neurol., Res. Inst. Brain Blood Vessels, Akita, Japan  
SOURCE: Metabolic Brain Disease (1991), 6(3), 111-24  
DOCUMENT TYPE: CODEN: MBDIEE; ISSN: 0885-7490  
LANGUAGE: Journal English  
AB The effect of HA1077, an intracellular calcium antagonist, on neurotransmitter metabolism in rat brain was investigated *in vivo*. After administration of HA1077, at doses of 0.1, 0.3, and 3 mg/kg, 5-hydroxyindoleacetic acid (5-HIAA) levels increased in most regions except midbrain. In the striatum, parallel increases of both serotonin (5-HT) and 5-HIAA levels were observed at 0.3 mg/kg, but only the 5-HT level increased at 0.1 mg/kg. These results suggest that HA1077 may activate the turnover or synthesis of 5-HT. After administration of HA1077 at 0.3, 1, and 3 mg/kg, the dopamine (DA) level was increased in the striatum, but 3,4-dihydroxyphenylacetic acid (DOPAC) and homovanillic acid levels were unchanged. After HA1077 administration at 1 mg/kg, both DA and DOPAC levels increased in the hypothalamus and only DA level increased in the cerebral cortex. By contrast, DOPAC level decreased in the midbrain after HA1077 treatment at 0.1 and 0.3 mg/kg, and in the brainstem at 0.1 and 10 mg/kg. The ratio of [<sup>3</sup>H]-N-methylspiperone accumulation relative to that in the cerebellum did not change after HA1077 treatment at any of the doses employed. Thus, the effects of HA1077 on neurotransmitter metabolism are complex and vary depending on the dosage and sites of the brain. Although the dose-dependent effects of HA1077 on neurotransmitter metabolism are similar to those of calcium entry blockers, HA1077 can facilitate DA synthesis in the hypothalamus and striatum, unlike the calcium entry blockers.  
IT 103745-39-7, HA1077  
RL: BIOL (Biological study)  
(neurotransmitter metabolism response to, in brain)  
RN 103745-39-7 CAPLUS  
CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]- (CA INDEX NAME)



L41 ANSWER 56 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 1991:178400 CAPLUS  
 DOCUMENT NUMBER: 114:178400  
 ORIGINAL REFERENCE NO.: 114:29899a  
 TITLE: Isoquinolinesulfonamides for improvement of brain function  
 INVENTOR(S): Asano, Toshio; Yoshida, Koji  
 PATENT ASSIGNEE(S): Asahi Chemical Industry Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 02256617	A	19901017	JP 1989-76595	19890330
JP 2720348	B2	19980304		
PRIORITY APPLN. INFO.:			JP 1989-76595	19890330
OTHER SOURCE(S):	MARPAT	114:178400		

GI



AB Isoquinolinesulfonamides I [R1 = H, Cl, OH; when R1 = H, then A = (C1-10 alkyl-, aryl-, aralkyl-substituted) C2-6 alkylene; R2 = H, Cl-10 linear or branched alkyl, PhCH<sub>2</sub>; R3 = H, Cl-6 linear or branched alkyl, aryl, aralkyl; R2R3 may form (C1-10 alkyl-, Ph-, PhCH<sub>2</sub>-substituted) C≤4 alkylene; R4 = H, Cl-6 linear or branched alkyl, aryl, aralkyl, Bz, cinnamoyl, cinnamoyl, furoyl, PhCH(OR5)CH<sub>2</sub>, C(:NR6)NHR'; NR3R4 may form (O-containing) heterocyclil; R5 = lower alkyl; R6 = R7 = H; R6R7 may form C2-4 alkylene; when R1 = Cl or OH, then A = (C1-6 alkyl-substituted) C2-6 alkylene; R2, R3 = H, Cl-6 linear or branched alkyl; R2R3 may form (C1-6 alkyl-substituted) ethylene or trimethylene; R4 = H, Cl-6 alkyl, amidino] or their salts, which have no anesthetic effect, are useful for improvement of brain function. 1-(5-Isoquinolinesulfonyl)homopiperazine.HCl (II) at 100 μM increased mitochondria respiration control ratio (state 3/state 4) to .apprx.5.49 in rat brain, vs. no effect, for nicardipine. LD<sub>50</sub> of II was 60 mg/kg i.v. and 335 mg/kg p.o. in rats. Tablets were formulated containing II 20, crystalline cellulose 25, lactose 98.5, Mg stearate 1.5, and CMC Ca 5 mg.

IT 105628-07-7

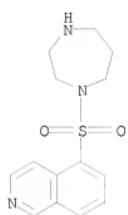
RL: PRP (Properties)

(Isoquinolinesulfonamides for improvement of brain function)

RN 105628-07-7 CAPLUS

CN Isoquinoline, 5-[{hexahydro-1H-1,4-diazepin-1-yl}sulfonyl]-, hydrochloride

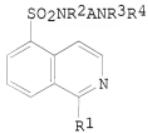
(1:1) (CA INDEX NAME)



● HCl

L41 ANSWER 57 OF 57 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 1987:32864 CAPLUS  
 DOCUMENT NUMBER: 106:32864  
 ORIGINAL REFERENCE NO.: 106:5507a,5510a  
 TITLE: Substituted isoquinolinesulfonyl compounds  
 INVENTOR(S): Hidaka, Hiroyoshi; Sone, Takanori  
 PATENT ASSIGNEE(S): Asahi Chemical Industry Co., Ltd., Japan  
 SOURCE: Eur. Pat. Appl., 85 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 187371	A2	19860716	EP 1985-116520	19851223
EP 187371	A3	19861217		
EP 187371	B1	19910619		
R: AT, BE, CH, JP 61152658 JP 04081986 JP 61227581 JP 05003851 AT 64598 US 4678783 US 4678783	DE, FR, GB, IT, LI, LU, NL, SE A B A B T A B1	19860711 19921225 19861009 19930118 19910715 19870707 19950404	JP 1984-273908 JP 1984-273908 JP 1985-68512 AT 1985-116520 US 1985-813973	19841227 19850402 19851223 19851227 19851223
PRIORITY APPLN. INFO.:			JP 1984-273908 JP 1985-68512 EP 1985-116520	A 19841227 A 19850402 A 19851223
OTHER SOURCE(S): GI	CASREACT 106:32864; MARPAT 106:32864			

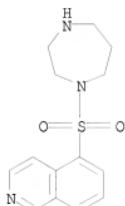


AB The title compds. I [R1 = H, Cl, OH; R2R3 = (un)substituted ethylene or trimethylene; R2, R3 = H, Cl-6 alkyl; A = (un)substituted C2-6 alkylene; R4 = H, Cl-6 alkyl, amidino] and their salts, useful for treatment of circulatory organ diseases, were prepared. Thus, 1-chloroisooquinoline was reacted with fuming H<sub>2</sub>SO<sub>4</sub> and the sulfonic acid formed was converted to the sulfonyl chloride which was reacted with a diamine to give N-(4-aminobutyl)-1-chloro-5-isoquinolinesulfonamide (II). In tests on relaxation of mesenteric artery II showed an ED<sub>50</sub> of 7 μM.  
 IT 103745-39-7P 105628-07-7P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);

BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of, as drug)

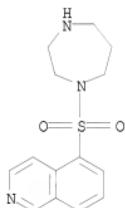
RN 103745-39-7 CAPLUS

CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]- (CA INDEX  
NAME)



RN 105628-07-7 CAPLUS

CN Isoquinoline, 5-[(hexahydro-1H-1,4-diazepin-1-yl)sulfonyl]-, hydrochloride  
(1:1) (CA INDEX NAME)



● HCl